Notification Tracking Sheet

Bp number: 00-005-01n

App number: 2000-1XRAB Begin movement: 1/04/00 1/05/00 End movement: Received: 1/03/01 Institution: Monsanto Begin release: 1/04/00 Wheat End release: 1/03/01 Recipient: 2.00 Status: Pending Acre: Effective date: 2/04/00 CBI status: CBI HT - Glyphosate tolerant Phenotype: Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield, MO 63198 636-737-7085 Telephone: (b) (6), (b) (7)(C) Fax: _____ Initial Date [V] Assign Bp number and initial data entry [N Review by biotechnologist M Letter of notification to State (fed-ex) [KLW] [] State response O/d Loc Site Reg Interstate *Dest*CO *WR * Interstate *Dest*KS *SCR * Interstate *Orig*CO *WR *SCR * Interstate *Orig*KS Release *CO 1*WR * E Enter genes into database Letter of acknowledgement/denial/withdraw Enter final data into database



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID

2000-1XRAB

Permit Unit

January 04, 2000

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-005-01n

1. USDA Reference Number

2. Applicant Reference Number 2000-1XRAB

3. Applicant/Responsible Party

(b)(6), (b)(7)(c)

Phone

)(6), (b)(7)(c)

(b)(6), (b)(7)(c)

FAX

636/737-7085

Monsanto Company

EMail

(b)(6), (b)(7)(c) @monsanto.com

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

January 04, 2000

- January 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate tolerant

Cultivar/Variety: Bobwhite and various breeding lines see Appendix A

Monsanto Reference ID

2000-1XRAB

designation of transformed line:

33391, 33512

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [

CRI

(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 --] - CBI

CBI

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-1XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 200 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

CO, KS

CO, KS

Ship From:

CO



(b) (4) , Sedgwick County, KS, (b) (4) CONTACT: (b)(4), (b)(6), (b)(7)(c) , K

Ship To:

CO

(b) (4) , Weld County, CO, (b) (4), USA

CONTACT: (b)(4), (b)(6), (b)(7)(c)

CO, (c)(4), (b)(6), (b)(7)(c)

Monsanto Reference ID

2000-1XRAB



Monsanto Reference ID

2000-1XRAB

Release Sites:

NUMBER OF STATES/TERRITORIES AND SITES:

CO (1)

CO

(b)(4), (b)(6), (b)(7)(c), Weld County, CO, USA, 2 acres.

RESPONSIBLE PERSON/RESEARCHER: (b)(4), (b)(6), (b)(7)(c)



Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

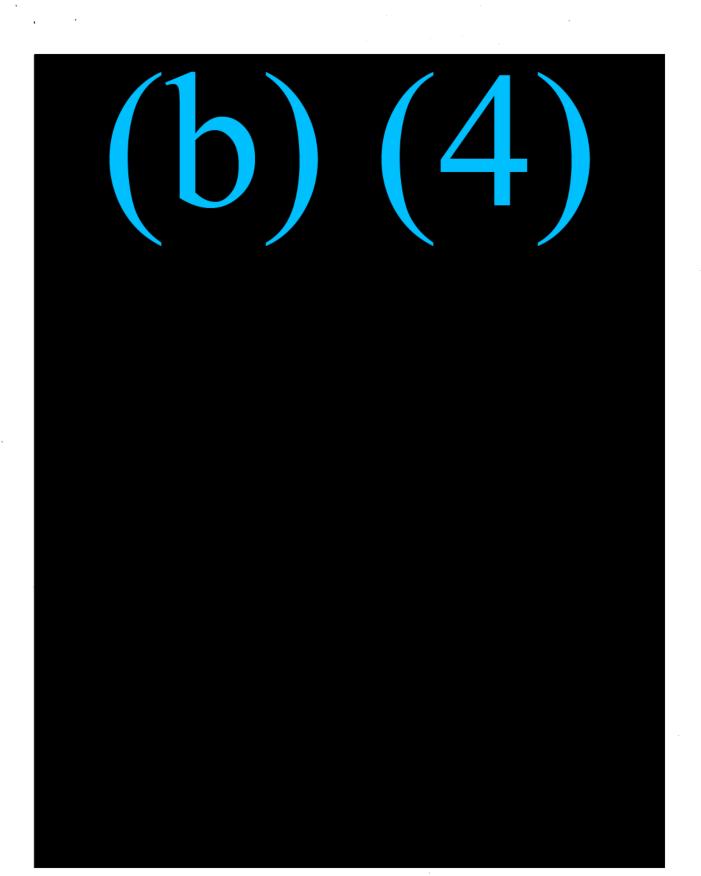
Monsanto Reference ID 2000-1XRAB

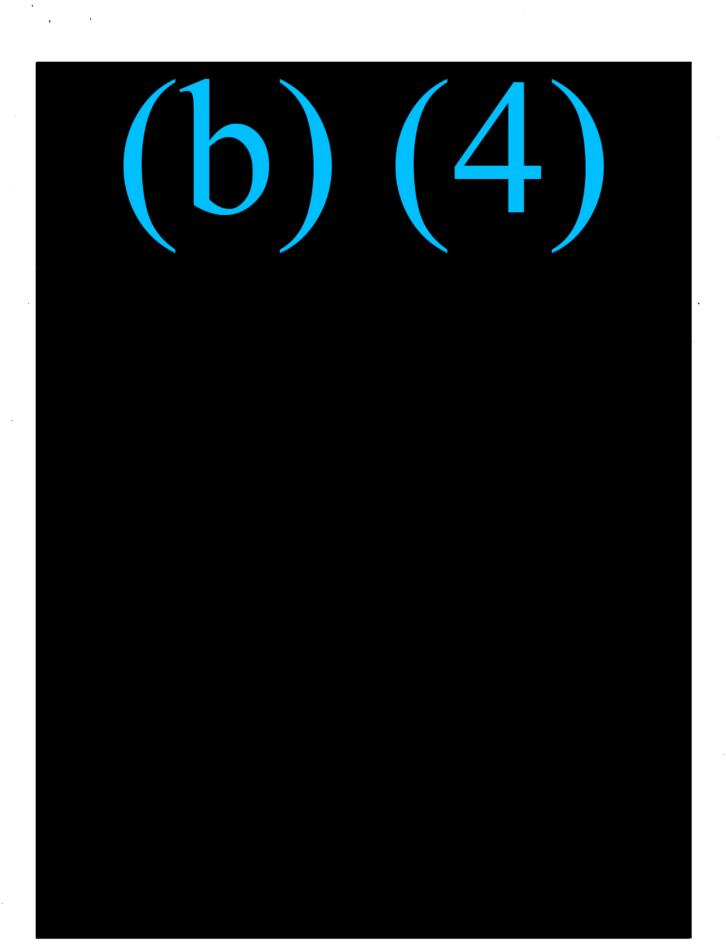
9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company January 04, 2000





CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (10th Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create

essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be

able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198

January 04, 2000

PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID

2000-1XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-005-01n

1. USDA Reference Number

2. Applicant Reference Number 2000-1XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Phone

(b) (6), (b) (7)(C)

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FAX

636/737-7085

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700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

January 04, 2000

January 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

Phenotype:

Glyphosate tolerant

HT

Cultivar/Variety: Bobwhite and various breeding lines see Appendix A

Monsanto Reference ID

2000-1XRAB

designation of transformed line:

33391, 33512

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/i2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

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Monsanto Reference ID

2000-1XRAB

7.	Mode	of	Transi	format	ion

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 200 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

CO, KS

CO, KS

Ship From:

CO

(b) (4)

, Weld County, CO, (b)(4),(b)(6),(b) USA

 $\begin{array}{l} \textbf{CONTACT:} & \textbf{(b) (4), (b) (6), (b) (7)(C)} \\ \textbf{(b) (4), (b) (6), (b) (7)(C)} & \textbf{(b) (4), (b) (6), (b) (7)(C)} \end{array}$

KS

(b)(4)

, Sedgwick County, KS, (b) (4)

CONTACT:

(b) (4), (b) (6), (b) (7)(C)

KS, (6)(9).(6)(6).(

Ship To:

CO

(b) (4)

I, Weld County, CO, (b) (4) USA

Monsanto Reference ID

2000-1XRAB

KS

(b) (4)

, Sedgwick County, KS, (b) (4)

CONTACT:

(b) (4), (b) (6), (b) (7)(C)

KS, (6)(4),(6)(6),(

Monsanto Reference ID

2000-1XRAB

Release Sites:

NUMBER OF STATES/TERRITORIES AND SITES:

CO (1)

CO

(b) (4), (b) (6), (b) (7)(C) Weld County, CO, USA, 2 acres.

 $\begin{array}{lll} \textbf{RESPONSIBLE PERSON/RESEARCHER:} & \textbf{(b) (4), (b) (6), (b) (7)(C)} \\ \textbf{(b) (4), (b) (6), (b) (7)(C)} & \textbf{CO,} & \textbf{USA,} & \textbf{(b) (4), (b) (6), (b) (7)(C)} \end{array}$



Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-1XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company January 04, 2000

(b) (4)

(b) (4)

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
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Monsanto Reference ID

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January 04, 2000

USDA, APHIS, PPQ, BSS

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00-005-01n

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4. Duration of Introduction

Interstate Movement and Release

January 04, 2000

January 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate tolerant

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2000-1XRAB

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Monsanto Reference ID

2000-1XRAB

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Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

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ORIGIN:

DESTINATION:

CO, KS

CO, KS

Ship From:

CO

(b) (4)

I, Weld County, CO, (b) (4) USA

 $\begin{array}{c} \textbf{CONTACT:} & \textbf{(b) (4), (b) (6), (b) (7)(C)} \\ \textbf{(b) (b) (b) (b) (C), (b) (7)(C)} & \textbf{(b) (4), (b) (6), (b) (7)(C)} \end{array}$

KS

(b) (4)

, Sedgwick County, KS, (b) (4)

CONTACT:

(b) (4), (b) (6), (b) (7)(C)

KS, (6)(4),(6)(6),(

Ship To:

CO

(b)(4)

, Weld County, CO, (b) (4) USA

 $\begin{array}{ll} \textbf{CONTACT:} & \textbf{(b)} \ (4), \ (b) \ (6), \ (b) \ (7)(C) \\ \text{(b)} \ (4), \ (b) \ (6), \ (b) \ (7)(C) \\ \end{array}$

Monsanto Reference ID 2000-1XRAB

KS

(b) (4)

Sedgwick County, KS, (b) (4)

CONTACT:

(b) (4), (b) (6), (b) (7)(C)

KS, (6)(4),(6)(6),(

COLDELETED

Monsanto Reference ID 2000-1XRAB

Release Sites:

NUMBER OF STATES/TERRITORIES AND SITES:

CO (1)

CO

(b) (4), (b) (6), (b) (7)(C) Weld County, CO, USA, 2 acres.

 $\begin{array}{ll} {\sf RESPONSIBLE\ PERSON/RESEARCHER:} & (b)\ (4),\ (b)\ (6),\ (b)\ (7)(C) \\ & ,\ CO^{(6)\ (6),\ (6)\ (6),\ (6)\ (7)(C)} \end{array}$



MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
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PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-1XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company January 04, 2000

(b) (4)

(b) (4)

Mr. Mitch Yergert Colorado Department of Agriculture 700 Kipling Street - Suite 4000 Lakewood, CO 80215-5894

January 5, 2000

Dear Mr. Yergert:

Enclosed is notification 00-005-01n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-005-01n

Applicant #: 2000-1XRAB

Received:

January 5, 2000

Effective: February 4, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: CO KS

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION
State concurs with APHIS determination.
State DOES NOT CONCUR and offers the following reasons:
Name of State official:
Signature:
Date:
State: Phtlog01/P4

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

January 5, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-005-01n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-005-01n

Applicant #: 2000-1XRAB

Received:

January 5, 2000

Effective:

February 4, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: CO KS

Release destination: CO

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

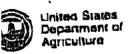
/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOTIFICATION
State concurs with APHIS determination.
State DOES NOT CONCUR and offers the following reasons:
Name of State official:
Signature:
Date:
State: Rotloc01/R4



DAS ISMINA Plant Hearin

4700 River Road INTIRIVERDAJA, MD 20737

gg # 15

Inspection Service

January 5, 2000

Mr. Mitch Yergert Colorado Department of Agriculture 700 Kipling Street - Suite 4000 Lakewood, CO 80215-5894

Dear Mr. Yergert:

Enclosed is notification 00-005-01n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bo number

00-005-01n

Applicant #: 2000-1XRAB

Received:

January 5, 2000

Effective:

February 4, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: CO KS

Release destination:

CO

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

E. Diamie Hatmaker, Unier Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R, Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION			
State DOES NOT CONCUR and offers the following reasons:			
Name of State official: Mitchell Yergert			
Signature: (b) (6), (b) (7)(C)			
Date:			
State: Colorado Rptloc01/R4			



An Equal Opportunity Employee



DIR ISMINA Plant Health Inspection Service

Post-it* Fax Note 7671	Date 1 3 pages
To Diana, Antonolor	From Tom Sim
Co./Dept. 0504-	Co. 165 Depl. of Agri.
Phone # 301-734-5787	Phone # 785-862-2180
Fax # 301-734. 89 10	Fax # 785-862-0727

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

January 5, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-005-01n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-005-01n

Applicant #: 2000-1XRAB

Received:

January 5, 2000

Effective:

February 4, 2000

Institution: Monsanto

Recipient:

Interstate destination: CO KS

Release destination: CO

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

. s	TATE RESPONSE TO NOTIFIC	ATION
State concurs with	APHIS determination.	of this notice.
	UR and offers the fellow	
Name of State official: Signature (b) (6), (b) (7)	Thomas Sin 19	
Date: 1/13/00	-	
State: Kansa	. , Rptlo	c01/R4



An Equal Opportunity Employee

(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C):

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after February 4, 2000.

Interstate movement and Release Notification no. 00-005-01n (2000-1XRAB) Regulated article - Wheat Destinations - Colorado, Kansas

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- M. Yergert, Colorado Dept. of Agric., Lakewood, CO
- T. Sim, Kansas State Board of Agric., Topeka, KS
- R. Stoaks, PPQ, WR, Sacramento, CA
- D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-005-01n



August 10, 2000

MONSANTO COMPANY
700 CHESTERFIELD PKWY NORTH
CHESTERFIELD, MISSOURI 63198

PHONE (314) 694-1000 http://www.monsanto.com

Ms. Dianne Hatmaker Animal and Plant Health Inspection Services Biotechnology and Scientific Services 4700 River Road, Unit 147 Riverdale, MD

Dear Ms. Hatmaker;

Monsanto's acknowledged wheat notification number 2000-1XRAB, USDA number 00-005-01n, is requesting the amount of seed be increased to 1000 pounds.

If you need any further information, please contact me at (b) (6), (b) (7)(C)

(b)
$$(6)$$
, (b) (7) (C)

cc:

M. Yergert, Colorado Dept. of Agric., Lakewood, CO R. Stoaks, PPQ, WR, Sacramento, CA



August 21, 2000

MONSANTO COMPANY
700 CHESTERFIELD PKWY NORTH
CHESTERFIELD, MISSOURI 63198
PHONE (314) 694-1000
FAX (636) 737-7085
http://www.monsanto.com

Ms. E Dianne Hatmaker Animal and Plant Health Inspection Services Biotechnology and Scientific Services 4700 River Road, Unit 147 Riverdale, MD

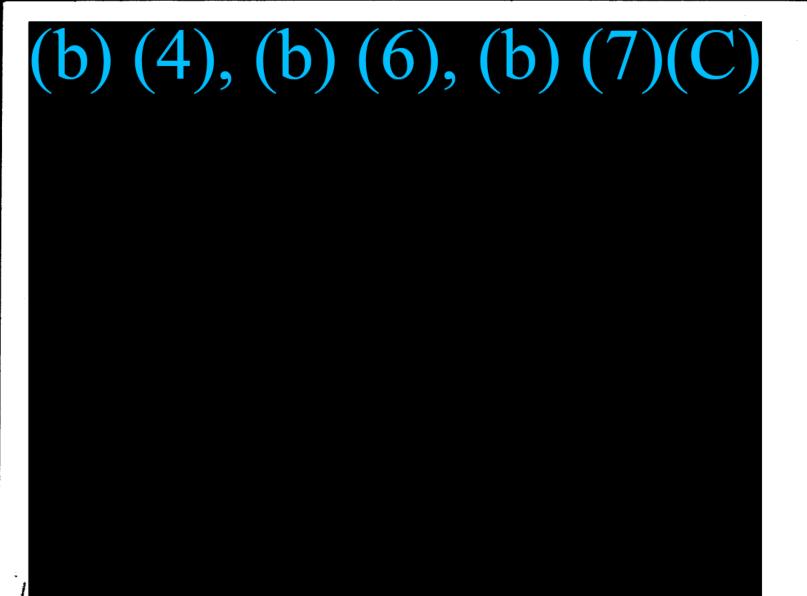
Dear Ms. Hatmaker;

In reviewing Monsanto's acknowledged wheat notification USDA number 00-005-01n, Monsanto number 2000-1XRAB it was discovered that PV code PV-TXGT12 was omitted. Line number 33512 should be linked to that line. I have enclosed the molecular information that constitutes that PV code.

I apologize for any inconvenience this has caused, if you have any questions, please phone me at (b) (6), (b) (7)(C)

(b)
$$(6)$$
, (b) (7) (C)

Enclosures



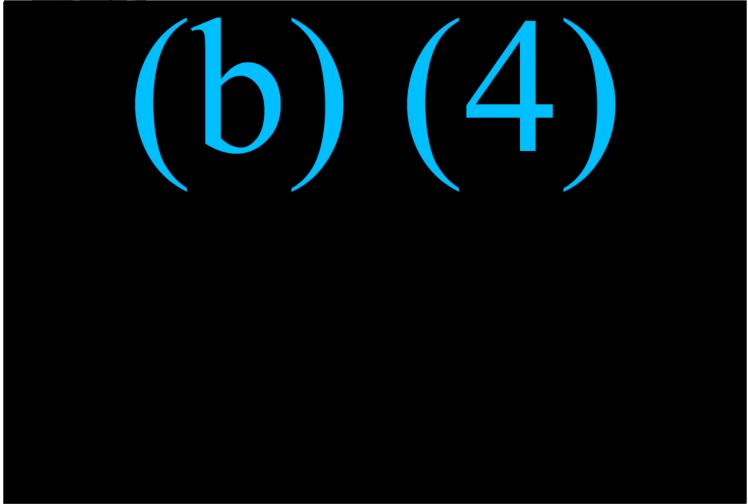
(b) (6), (b) (7)(C) June 8, 2001

Monsanto Company

Location
(b) (4), (b) (6), (b) (7)(C)

County Weld State CO

Weld County, CO



August 7, 2001

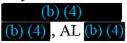
MONSANTO COMPANY
700 CHESTERFIELD PKWY NORTH
CHESTERFIELD, MISSOURI 63198
PHONE (314) 694-1000
FAX (636) 737-7085
http://www.monsanto.com

Ms Dianne Hatmaker Animal and Plant Health Inspection Services Biotechnology and Scientific Services 4700 River Road, Unit 147 Riverdale, MD

Dear Ms. Hatmaker:

In reviewing Monsanto acknowledged cotton notification, it was discovered a responsible researcher address was incorrectly given. The Monsanto notification is # 2000-735XRAB, USDA # 00-005-01n. ₹The address for (b) (4), (b) (6), (b) (7)(C) should be;

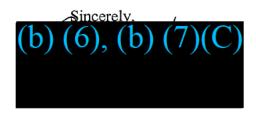
(b) (4)
Department of Entomology and Plant Science



Lee County

Melanie will move the seed to the release site in Escambia County on the day of release.

If you have any questions, please call at 636/737-6032.



cc: S. Wood, USDA, APHIS, PPQ

G. Karr, Alabama Dept. of Agric.



August 10, 2001

MONSANTO COMPANY
700 CHESTERFIELD PKWY NORTH
CHESTERFIELD, MISSOURI 63198
PHONE (314) 694-1000
FAX (636) 737-7085
http://www.monsanto.com

Ms Mary Jackson Animal and Plant Health Inspection Services Biotechnology and Scientific Services 4700 River Road, Unit 147 Riverdale, MD

Dear Ms Jackson:

(b) (4), (b) (6), (b) (7)(C)

If you have any questions, please call at 636/737-6032.



cc: S. Wood, USDA, APHIS, PPQ G. Karr, Alabama Dept of Agric.

2000 Wheat Field Trial Report USDA# 00-005-01n Monsanto# 2000-1XRAB

December 7, 2001

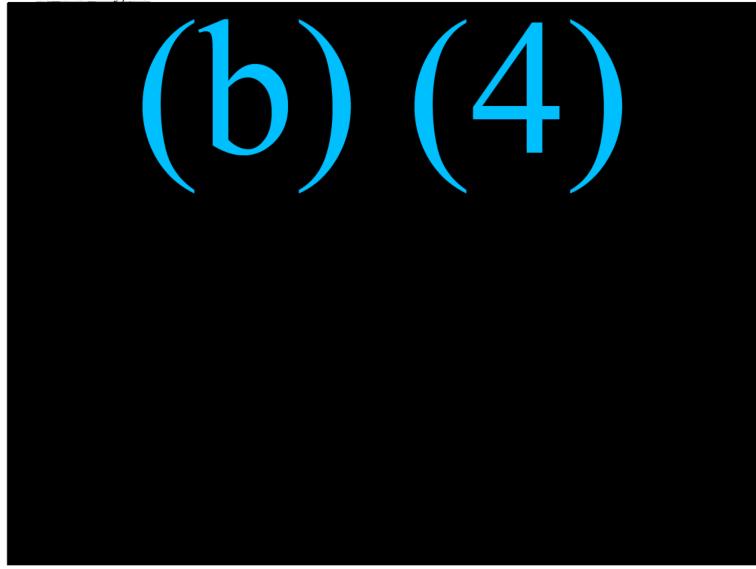
Biotech Field Compliance Team Monsanto Company

Location Site 1

County Weld

State CO

Weld County, CO



2000 Wheat Field Trial Report USDA # 00-005-01n Monsanto # 2000-1XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1

County Weld

State CO

Weld County, CO

Planting Date: February 15, 2000 Harvest Date: August 2, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10 line 33391; PV-TXGT12 line 33512

Purpose of trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBl deleted]

General Results of Field Trial: [CBI deleted]

Page 1 of 1

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (lOth Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

Notification Tracking Sheet

Bp number: 00-034-08n

App number: 2000-63XRAB Begin movement: 2/02/00 Received: 2/03/00 End movement: 2/01/01 Institution: Monsanto Begin release: 2/02/00 Recipient: Wheat End release: 2/01/01 Status: Pending Acre: 3.00 Effective date: 3/04/00 CBI status: CBI Phenotype: HT - Glyphosate tolerant Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield, MO Telephone: Fax: 636-737-7085 Initial Date [V] Assign Bp number and initial data entry 2. [] Review by biotechnologist Letter of notification to State Led -CX [] State response Site Reg O/d Loc Interstate *Dest*CO *WR Interstate *Dest*MO *SCR * Interstate *Orig*CO *WR Interstate *Orig*MO *SCR * Release *CO 1*WR]] Enter genes into database 6. /Letter of (acknowledgement)denial/withdraw 7. Enter final data into database



MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 02, 2000

Monsanto Reference ID

2000-63XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-034-08n

1. USDA Reference Number

2. Applicant Reference Number 2000-63XRAB

3. Applicant/Responsible Party

Phone

FAX **EMail**

636/737-7085 b) (6), (b) (7)(C) monsanto.com

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 02, 2000

- February 01, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate tolerant

Cultivar/Variety Bobwhite and local Breeding lines.

Monsanto Reference ID

2000-63XRAB

designation of transformed line:

line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 --

(b)(4)

(b) (4) - CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

(b) (4)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [- CBI

CBI

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-63XRAB

designation of transformed line: line 33512 Constructs: PV-TXGT12 **GENE OF INTEREST** CBI Promoter: CMP 3/I5 -- [(b) (4) CBI (b) (4) Gene: CTP7-CP4 -b) (4) - CBI Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA. CBI (b) (4) (b) (4)Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CBI

(b) (4)

- CRI

(b) (4)

Terminator: M1 --

Moneanto	Reference	ID
MOHSanto	neierence	ı

2000-63XRAB

		_	_	_	
7	Mode	ωf	Trans	form	ation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

CO, MO

CO, MO

Ship From:

CO

Larimer County, CO(b)(4) .S.A

MO

*Monsanto Company, 700 Chesterfield Parkway North, St. Louis, St. Louis County, MO, 63198

Monsanto Company, 700 Chesterfield Parkway North, St. Louis, MO, CONTACT: 63198,

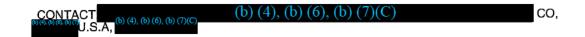
Ship To:

CO

Larimer County, CO

Monsanto Reference ID

2000-63XRAB



MO

*Monsanto Company, 700 Chesterfield Parkway North, St. Louis, St. Louis County, MO, 63198

CONTACT: (b) (4), (b) (6), (b) (7) (C) Monsanto Company, 700 Chesterfield Parkway North, St. Louis, MO, 63198

Monsanto	Reference	ID
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2000-63XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

CO (1)

CO

(b) (-

Rio Grande County, CO,

USA, 3 acres.

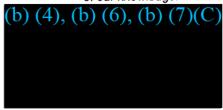


MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-63XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 02, 2000 Monsanto ID: 2000-63XRAB

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (IOth Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (IOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-63XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

February 02, 2000

Monsanto Reference ID

2000-63XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-034-08n

1. USDA Reference Number

2. Applicant Reference Number 2000-63XRAB

3. Applicant/Responsible Party

Phone

b) (6), (b) (7)(C)

b) (6), (b) (7)(C)@monsanto.com

FAX

636/737-7085

EMail

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Monsanto Company

Interstate Movement and Release

February 02, 2000

February 01, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate tolerant

Cultivar/Variety Bobwhite and local Breeding lines.

Monsanto Reference ID

2000-63XRAB

designation of transformed line:

line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-63XRAB

designation of transformed line: line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

CBI Promoter: CMP 3/I5 -- [CBI Deleted]

CBI Gene: CTP7-CP4 -- [CBI Deleted]

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI Promoter: MP4 -- [CBI Deleted]

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

CBI Terminator: M1 -- [CBI Deleted]

Monsanto Reference ID

2000-63XRAB

7	Mode	of '	Tranci	format	lion
1.	woue	01	Hans	iomiai	uon

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

CO, MO

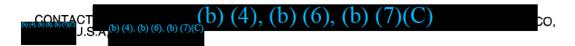
CO, MO

Ship From:

CO

(b)(4)

Larimer County, $CO_{i}(b)(4)U.S.A$



MO

*Monsanto Company, 700 Chesterfield Parkway North, St. Louis, St. Louis County, MO,

CONTACT. (b) (4), (b) (6), (b) (7)(C) Monsanto Company, 700 Chesterfield Parkway North, St. Louis, MO, 63198,

Ship To:

CO

(b)(4)

Larimer County, CO, (b) (4)

Monsanto Reference ID

2000-63XRAB



MO

*Monsanto Company, 700 Chesterfield Parkway North, St. Louis, St. Louis County, MO, 63198

CONTACT. (b) (4), (b) (6), (b) (7)(C) Monsanto Company, 700 Chesterfield Parkway North, St. Louis, MO, 63198,

Monsanto	Deference	ın
MOUSAUIO	Beterence	

2000-63XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

CO (1)

CO

(b)(4)

, Rio Grande County, CO,

USA, 3 acres.

RESPONSIBLE PERSON/RESEARCHEF (b) (4), (b) (6), (b) (7)(C) (C), 80523, U.S.A. (b) (4), (b) (6), (b) (7)(C)



Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-63XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 02, 2000

CALDELE IND

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

February 02, 2000

Monsanto Reference ID

2000-63XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

b) (6), (b) (7)((

00-034-08n

1. USDA Reference Number

2. Applicant Reference Number 2000-63XRAB

3. Applicant/Responsible Party

Phone

(b) (6), (b) (7)(C)

b) (6), (b) (7)(C) monsanto.com

FAX EMail 636/737-7085

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 02, 2000

February 01, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate tolerant

Cultivar/Variety Bobwhite and local Breeding lines.

Page 1 of 7

Monsanto Reference ID

2000-63XRAB

designation of transformed line:

line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

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GENE OF INTEREST

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CBI

PSPS

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Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-63XRAB

designation of transformed line: line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBÎ Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBl Deleted] CBl

Monsanto Reference ID

2000-63XRAB

7	Mada	of Tro	 mation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

CO, MO

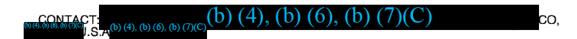
CO, MO

Ship From:

CO

(b)(4)

Larimer County, CO, (b) (4) U.S.A



MO

*Monsanto Company, 700 Chesterfield Parkway North, St. Louis, St. Louis County, MO, 63198

CONTACT: (b) (d), (b) (7) (C) Monsanto Company, 700 Chesterfield Parkway North, St. Louis, MO, 63198(b) (d), (b) (7) (C)

Ship To:

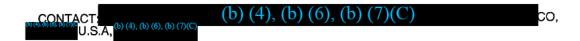
CO

(b)(4)

co,(b) (4) u.s.A

Monsanto Reference ID

2000-63XRAB



MO

*Monsanto Company, 700 Chesterfield Parkway North, St. Louis, St. Louis County, MO, 63198

CONTACT: (0) (4), (0) (6), (b) (7) (C) Monsanto Company, 700 Chesterfield Parkway North, St. Louis, MO, 63198 (0) (4), (b) (6), (b) (7) (C)

CGIDELETED

Monsanto Reference ID

2000-63XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

CO (1)

CO

(b) (4)

Rio Grande County, CO,

USA, 3 acres.

RESPONSIBLE PERSON/RESEARCHER (b) (4), (b) (6), (b) (7)(C)CO,

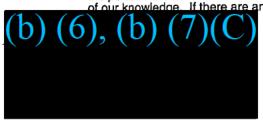


MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-63XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 02, 2000 Mr. Mitch Yergert Colorado Department of Agriculture 700 Kipling Street - Suite 4000 Lakewood, CO 80215-5894

February 8, 2000

Dear Mr. Yergert:

Enclosed is notification 00-034-08n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-034-08n

Applicant #: 2000-63XRAB

Received:

February 3, 2000

Effective:

March 4, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: CO MO

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

	STATE RESPONSE TO NOTIFICATION
State	concurs with APHIS determination.
State I	DOES NOT CONCUR and offers the following reasons:
Name of State	official:
Signature:	
Date:	
State:	

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

February 8, 2000

Dear Mr. Brown:

Enclosed is notification 00-034-08n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-034-08n

Applicant #: 2000-63XRAB

Received:

February 3, 2000

Effective: March 4, 2000

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Recipient:

Wheat

Interstate destination: CO MO

Release destination:

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Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOT	TIFICATION
State concurs with APHIS determination.	
State DOES NOT CONCUR and offers the fo	ollowing reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4



Animal and Plant Health Inspection Service · · 4700 River Road Riverdale, MD 20737

COTES 11 FIN2: 35

Mr. Mitch Yergert Colorado Department of Agriculture 700 Kipling Street - Suite 4000 Lakewood, CO 80215-5894

February 8, 2000

Dear Mr. Yergert:

Enclosed is notification 00-034-08n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-034-08n

Applicant #: 2000-63XRAB

Received:

February 3, 2000

Effective: March 4, 2000

Institution: Monsanto

Recipient: Wheat

STATE RESPONSE TO NOTIFICATION

Interstate destination: CO MO Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

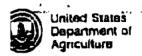
Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

	ermination.
State DOES NOT CONCUR and of	fers the following reasons:
Name of State official: Mitchell	
signature: (b) (6), (b)	$(7)(\mathbf{C})$
Date: 3-16-00	
State: Colorado	Rorloc01/R4

UPHS - Protecting American Agriculture

An Equal Opportunity Employer



Animal and Plant Health Inspection Service · 4700 River Road Riverdale, MD 20737

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

February 8, 2000

Dear Mr. Brown:

Enclosed is notification 00-034-08n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-034-08n

Applicant #: 2000-63XRAB

Received:

February 3, 2000

Effective:

March 4, 2000

Institution: Monsanto

Recipient: Wheat

Interstate destination: CO MO

Release destination: CO

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7-CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc. D. DeWeese, PPQ, Jefferson City, MO

STATE RESPON	SE TO NOTIFICATION
State concurs with APHIS determined	mination.
State DOES NOT CONCUR and offer	/ ~ ^ -
Name of State official. McCae	(T) (C) Drown
Signature: (b) (b), (b)	(/)(C)
Date: 2/17/00	to all the second secon
State: MO	Rptloc01/R4

FEB 1 8 2000



(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 4, 2000.

Interstate movement and Release Notification no. 00-034-08n (2000-63XRAB) Regulated article - Wheat Destinations - Colorado, Missouri

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. All packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

In addition, please note on page 6 of this notification that Fort Collins is in Larimer County, not Rio Grande.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- M. Brown, Missouri Dept. of Agric., Jefferson City, MO
- M. Yergert, Colorado Dept. of Agric., Lakewood, CO
- D. DeWeese, PPQ, SCR, Jefferson City, MO
- R. Stoaks, PPQ, WR, Sacramento, CA
- File number 00-034-08n

2000 Wheat Field Trial Report USDA # 00-034-08n Monsanto # 2000-63XRAB

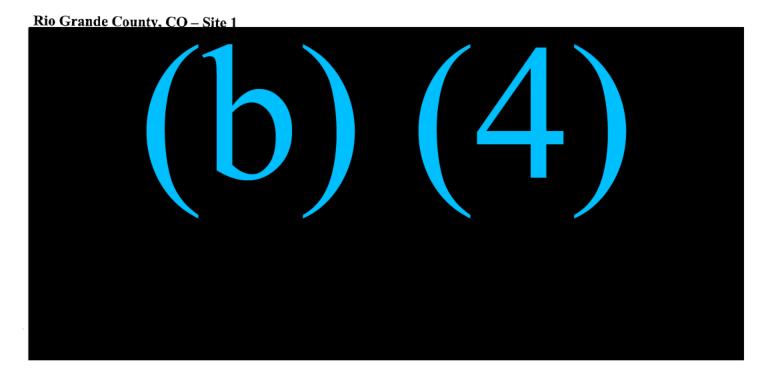
December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1

County Rio Grande

State CO



2000 Wheat Field Trial Report USDA # 00-034-08n Monsanto # 2000-63XRAB

December 7, 2001

Biotech Field Compliance Group Monsanto Company

Location Site 1

County

State

Rio Grande

CO

Rio Grande County, CO – Site 1 Planting Date: April 17, 2000

Harvest Date: September 7, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth, Weediness and Plant Stand Characteristics: [CBI

deleted]

Disposition of the Harvested Material: [CBI deleted]

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, <u>Critical Mass Energy Project v. NRC</u>, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

Notification Tracking Sheet

Bp number: 00-034-09n

App number: 2000-64XRAB Begin movement: 2/02/00 Received: 2/03/00 End movement: 2/01/01 Institution: Monsanto Begin release: 2/02/00 Recipient: Wheat End release: 2/01/01 Status: Pending Acre: Effective date: 3/04/00 CBI status: CBI HT - Glyphosate tolerant Phenotype: Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield Telephone: Fax: 636-737-7085 Initial Date [√] Assign Bp number and initial data entry [] Review by biotechnologist [$\sqrt{}$ Letter of notification to State $\bigcirc CC - CX$ [] State response O/d Loc Site Reg Interstate *Dest*MO *SCR * Interstate *Dest*SD *SCR * Interstate *Orig*MO *SCR * Interstate *Orig*SD *SCR * Release *SD 1*SCR * [] Enter genes into database Letter of (acknowledgement) denial/withdraw Enter final data into database



MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 02, 2000

Monsanto Reference ID

2000-64XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-034-09n

1. USDA Reference Number

2. Applicant Reference Number 2000-64XRAB

3. Applicant/Responsible Party

Phone

b) (6), (b) (7)(C

Monsanto Company

b) (6), (b) (7)(C

700 Cheserfield Parkway North

St. Louis

MO

63198

FAX

636/737-7085 **EMail**

b) (6), (b) (7)(C) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 02, 2000

- February 01, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate tolerate

Cultivar/Variety Bobwhite and Backcross progeny from Bobwhite and Ignot, Oxen, or SD3407

Monsanto Reference ID

2000-64XRAB

designation of transformed line: line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- (b) (4) CBI

(b) (4) - CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

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Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI

Monsanto Reference ID

2000-64XRAB

designation of transformed line: line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/15 -- [(b) (4) CBI

Gene: CTP7-CP4 -- [(b) (4) (b) (4) (b) (4) (c) (c) (d) (d)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [(b) (4) (b) (4) (c) (b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Monsanto	Reference	ID
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2000-64XRAB

		_	_	
7	Mode	Ωf	Tranel	formation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

MO, SD

MO, SD

Ship From:

MO



SD



CONTACT: (b) (4), (b) (6), (b) (7)(C) U.S.A.

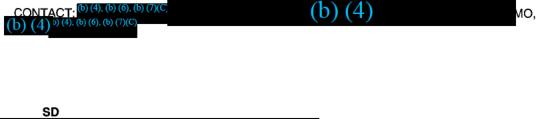
(6) (4), (6) (6), (6) (

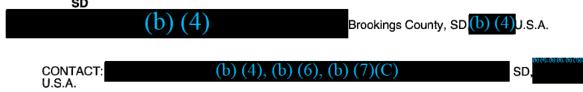
Ship To:

(b) (4) St. Louis County, MO, (b) (4)

Monsanto Reference ID

2000-64XRAB





Monsanto Reference ID

2000-64XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

SD (1)

SD

(b)(4)

Brookings County, SD, USA, 3 acres.

(b) (4), (b) (6), (b) (7)(C)

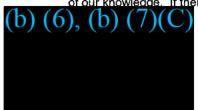


MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-64XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 02, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (lOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-64XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Monsanto ID: 2000-64XRAB

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

February 02, 2000

Monsanto Reference ID

2000-64XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-034-09n

1. USDA Reference Number

2. Applicant Reference Number 2000-64XRAB

3. Applicant/Responsible Party

Phone

(b) (6), (b) (7)(C)

FAX EMail 636/737-7085

(b) (6), (b) (7)(C)_{monsanto.com}

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 02, 2000

- February 01, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate tolerate

Cultivar/Variety Bobwhite and Backcross progeny from Bobwhite and Ignot, Oxen, or SD3407

Monsanto Reference ID

2000-64XRAB

designation of transformed line:

line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

designation of transformed line:

Terminator: M1 -- [CBI Deleted]

2000-64XRAB

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

line 33512

CBI

Monsanto Reference	ID
2000-64XRAB	

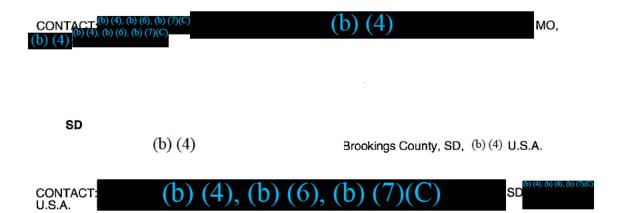
7. Mode of Transformation Disarmed Agrobacterium tumefaciens Interstate Movement and Release 8. Introduction Ship up to 1000 pounds of wheat seed to and from each location. ORIGIN: **DESTINATION:** MO, SD MO, SD Ship From: MO St. Louis County, MO, (b) (4) SD Brookings County, SD, (b) (4) U.S.A. (b)(4)CONTACT U.S.A. SD

Ship To:

MO
(b) (4)
St. Louis County, MO(b) (4)

Monsanto Reference ID

2000-64XRAB



Monsanto Reference ID

2000-64XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

SD (1)

SD

(b)(4)

Brookings County, SD, USA, 3 acres.

RESPONSIBLE PERSON/RESEARCHER (b) (4), (b) (6), (b) (7)(C)_{SD}, U.S.A. (b) (4), (b) (6), (b) (7)(C)

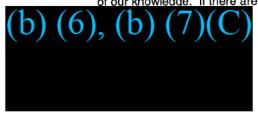


Monsanto Company
700 Chesterfield Parkway North
St. Louis, Missouri 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-64XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 02, 2000



MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 02, 2000

Monsanto Reference ID

2000-64XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-034-09n

1. USDA Reference Number

2. Applicant Reference Number 2000-64XRAB

3. Applicant/Responsible Party

b)(6),(b)(7)(0

Phone

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

FAX

EMail

636/737-7085

b) (6), (b) (7)(C)⊋monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 02, 2000

February 01, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

Phenotype:

Glyphosate tolerate

Cultivar/Variety Bobwhite and Backcross progeny from Bobwhite and Ignot, Oxen, or SD3407

HT

Page 1 of 7

Monsanto Reference ID

2000-64XRAB

designation of transformed line:

line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-64XRAB

designation of transformed line: line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBl Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID 2000-64XRAB

7. Mode of Transformation	Disarmed Agrobacterium tumefaciens		
8. Introduction	Interstate Movement and Release		
Ship up to 1000 pounds of wheat seed to and from each location.			
ORIGIN:	DESTINATION:		
MO, SD	MO, SD		
Ship From:			
MO			
(b) (4	St. Louis County, MO, (b) (4)		
CONTACT: (b) (4), (b) (6), (b) (7)(C	(b) (4)		
(b) (4) (b) (4), (b) (6), (b) (7)(C)	(D) (4) MO,		
SD (b) (4)	Brookings County, SD, (b) (4) U.S.A.		
	,		
CONTACT (b.	(4), (b) (6), (b) (7)(C)		
•			

Page 4 of 7

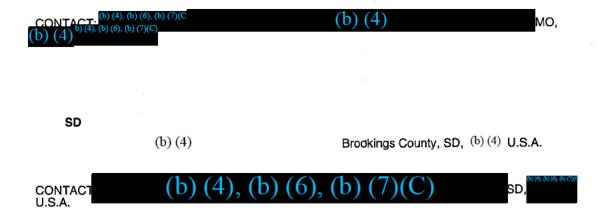
Ship To:

MO

St. Louis County, MO.(b) (4)

Monsanto Reference ID

2000-64XRAB



Monsanto Reference ID 2000-64XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

SD (1)

SD

(b) (4)

Brookings County, SD, USA, 3 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C)SD (10.000.000) J.S.A.

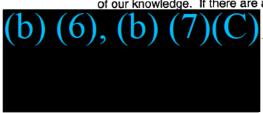
(b) (4), (b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-64XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 02, 2000

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

February 8, 2000

Dear Mr. Brown:

Enclosed is notification 00-034-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-034-09n

Applicant #: 2000-64XRAB

Received:

February 3, 2000

Effective: March 4, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO SD

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE I	RESPONSE TO NOTIFICATION
State concurs with APHIS	determination.
State DOES NOT CONCUR and	d offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Mr. Kevin Fridley Division of Agricultural Services South Dakota Department of Agriculture Foss Building-523 East Capitol Pierre, SD 57501-3182

February 8, 2000

Dear Mr. Fridley:

Enclosed is notification 00-034-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-034-09n

Applicant #: 2000-64XRAB

Received:

February 3, 2000

Effective: March 4, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO SD Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

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Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

S	TATE RESPONSE TO NOTIFICATION
State concurs with A	APHIS determination.
State DOES NOT CONC	UR and offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4



Animal and Plant Health Inspection Service

** 4700 River Road Riverdale, MD 20737

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture. 1616 Missouri Boulevard Jefferson City, MO 65102

February 8, 2000

Dear Mr. Brown:

Enclosed is notification 00-034-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-034-09n

Applicant #: 2000-64XRAB

Received:

February 3, 2000

Effective:

March 4, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO SD

Release destination:

SD

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cq. D. DeWeese, PPQ, Jefferson City, MO

STATE RES	PONSE TO NOTIFICATION
State concurs with APHIS de	termination.
State DOES NOT CONCUR and c	ffers the following reasons:
Name of State official 1	rel E- brown
Signature: (b) (6), (b)	(7)(C)
Date: 2(17(6)	<u>?</u> •
State: MO	Rptloc01/R4



An Equal Opportunity Employer



Animal and Plant Health Inspection Service

4700 River Road Riverdale, MD -20737

Mr. Kevin Fridley Division of Agricultural Services South Dakota Department of Agriculture Foss Building-523 East Capitol Pierre, SD 57501-3182

February 8, 2000

Dear Mr. Fridley:

Enclosed is notification 00-034-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-034-09n

Applicant #: 2000-64XRAB

Received:

February 3, 2000

Effective:

March 4, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO SD Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc; D. DeWeese, PPQ, Jefferson City, MO



STATE	RESPONSE	TO	NOTIFICATION
-------	----------	----	--------------

State concurs with APHIS determination.

State DOES NOT CONCUR and offers the following reasons:

Name of State official

Date:_

State:

Rptloc01/R4

A 10. 1



Protecting American Agriculture

(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 4, 2000.

Interstate movement and Release Notification no. 00-034-09n (2000-64XRAB) Regulated article - Wheat Destinations - Missouri, South Dakota

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- M. Brown, Missouri Dept. of Agric., Jefferson City, MO
- K. Fridley, South Dakota Dept. of Agric., Pierre, SD
- D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-034-09n

(b) (6), (b) (7)(C)

June 8, 2000 Monsanto Company

Location South Dakota State University Farm

County Brookings

State SD

Brookings County, SD

(b) (4)

2000 Wheat Field Trial Report USDA # 00-034-09n Monsanto # 2000-64XRAB

December 7, 2001

Biotech Field Compliance Group Monsanto Company

Location Site 1

County Brookings

State SD

Brookings County, SD - Site 1



2000 Wheat Field Trial Report USDA # 00-034-09n Monsanto # 2000-64XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1

County

State

Brookings

SD

Brookings County, SD - Site 1

Planting Date: May 1 and May 3, 2000

Harvest Date: August 4, 2000 and August 14, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391; PV-TXGT12, line 33512

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

General Results of Field Trial: [CBI deleted]

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (lOth Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project. v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

Monsanto ID: 2000-64XRAB

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

Notification Tracking Sheet

Bp number: 00-038-19n

2000-78XRAB Begin movement: 2/04/00 App number: 2/03/01 Received: 2/07/00 End movement: Institution: Monsanto Begin release: 2/04/00 Recipient: Wheat End release: 2/03/01 6.00 Status: Pending Acre: CBI status: CBI Effective date: 3/08/00 Phenotype: HT - Glyphosate tolerant Comments: Resp person: Parsed name: Address1: Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip: Chesterfield, MO (b) (6), (b) (7)(C Fax: 636-737-7085 Initial Date [2/9/2000 $[\sqrt{}]$ Assign Bp number and initial data entry [2/9/00]* [Review by biotechnologist [Letter of notification to State Fed - ex [] State response O/d Loc Site Reg

6.				ement/denial/withdraw		,, (/) 1	1. <i>a</i> la	8/001*	
5.	[V] / Enter genes into database					[a,d)]		[2/0/2006	
	Release	* *ND	*	1*SCR *	[]	[]	
	Release	* *MT	*	1*WR *	[]	[]	
	Interstate	*Orig*ND	*	*SCR *					
	Interstate	*Orig*MT	*	*WR *					
	Interstate	*Orig*MO	*	*SCR *					
	Interstate	*Dest*ND	*	*SCR *	[]	[]	
	Interstate	*Dest*MT	*	*WR *	-[]	[]	
	Interstate	*Dest*MO	*	*SCR *	Ĺ	j	Ĺ	j	

7. [📝 Enter final data into database



MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198

February 04, 2000

PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID

2000-78XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-038-19n

1. USDA Reference Number

2. Applicant Reference Number 2000-78XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

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636/737-7085 (b) (6) (b) (7)(

monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 04, 2000

February 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

Phenotype:

Glyphosate Tolerant

HT

Cultivar/Variety Bobwhite and BW251

Monsanto Reference ID

2000-78XRAB

designation of transformed line: line

line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa//2 -- (b) (4)
(b) (4) CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [(b) (4)] - CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-78XRAB

designation of transformed line:

line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -(b) (4) CBI

CBI

CBI

Gene: CTP7-CP4 -- [(b) (4)-GDI

(b)(4)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [

(b) (4)

CBI

(b) (4)] - CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

(b) (4)

Terminator: M1 --

CBI

Page 3 of 7

2000-78XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1200 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

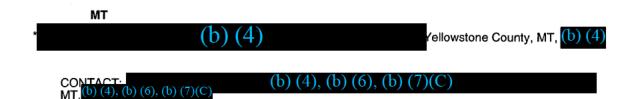
MO, MT, ND

MO, MT, ND

Ship From:

MO





ND

(b) (4) McHenry County, ND, (b) (4)

CONTACT: (b) (4), (b) (6), (b) (7)(C) $ND_{A}^{(b)}(4)$, (b) (6), (b) (7)(C)

Monsanto Reference ID 2000-78XRAB Ship To: MO (b) (4) St. Louis County, MO, (b) (4) CONTACT: (b) (4), (b) (6), (b) (7)(C) MT (b) (4) (b) (4) (c) (4) (d) (d) (ellowstone County, MT, (b) (4) CONTACT: (b) (4), (b) (6), (b) (7)(C) MT, (b) (4) MCHenry County, ND (b) (4)

CONTACT

Monsanto Reference ID

2000-78XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

MT (1), ND (1)

MT

(b) (4)

Yellowstone County, MT, USA, 3 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C) (b) (4), (b) (6), (b) (7)(C) $MT_{b}^{(6,6)(6,6)(7)}(4)$, (b) (6), (b) (7)(C)

ND

(b) (4), (b) (6), (b) (7)(C) McHenry County, ND, 3 acres.

RESPONSIBLE PERSON/RESEARCHER:

(b) (4), (b) (6), (b) (7)(C)

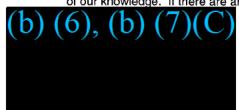


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Monsanto Reference ID 2000-78XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 04, 2000

Monsanto ID: 2000-78XRAB

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (lOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-78XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



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PHONE (314) 694-1000
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Monsanto Reference ID

2000-78XRAB

Permit Unit

February 04, 2000

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-038-19n

1. USDA Reference Number

2. Applicant Reference Number 2000-78XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Phone

(b) (6), (b) (7)(C

Monsanto Company

FAX EMail 636/737-7085 (b) (6), (b) (7)(C) monsanto.com

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 04, 2000

February 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite and BW251

Monsanto Reference ID

2000-78XRAB

designation of transformed line: line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-78XRAB

designation of transformed line: line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-78XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1200 pounds of wheat seed to and from each location.

ORIGIN:

MO, MT, ND

DESTINATION:

MO, MT, ND

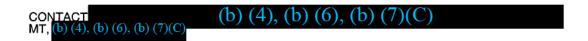
Ship From:

MO

MT

(b)(4)

Yellowstone County, MT, (b) (4)



ND

(b) (4)

McHenry County, ND, (b) (4)

CONTACT: (b) (4), (b) (6), (b) (7)(C) $^{\text{ND}}_{a}^{(b) (4), (b) (6), (b) (7)(C)}$

Monsanto Reference ID 2000-78XRAB Ship To: MO (b) (4) St. Louis County, MO, (b) (4) CONTACT: (b) (4), (b) (6), (b) (7)(C) MT (b) (4) (b) (4) (c) (d) (d) (ellowstone County, MT, (b) (4) ND (b) (4) McHenry County, ND, (b) (4)

CONTACT:

Monsanto Reference ID

2000-78XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

MT (1), ND (1)

MT

(b)(4)

Yellowstone County, MT, USA, 3 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4) (b) (4), (b) (6), (b) (7)(C) MT, (b) (4), (b) (6), (b) (7)(C)

ND

McHenry County, ND, 3 acres.

EBESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C)



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St. Louis, Missouri 63198
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http://www.monsanto.com

Monsanto Reference ID 2000-78XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 04, 2000

COLDELETED

Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID

2000-78XRAB

Permit Unit

February 04, 2000

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-038-19n

1. USDA Reference Number

2. Applicant Reference Number 2000-78XRAB

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700 Cheserfield Parkway North

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63198

4. Duration of Introduction

Interstate Movement and Release

February 04, 2000

- February 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite and BW251

Monsanto Reference ID

2000-78XRAB

designation of transformed line:

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Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene sion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene dusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-78XRAB

designation of transformed line:

line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted]

CBI

Gene: CTP7-CP4 -- [CFI Deleted]

CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium

tumefaciens T-DNA.

Promoter: MP4 -- [CBl Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted]

CBI

Monsanto Reference ID

2000-78XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1200 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

MO, MT, ND

MO, MT, ND

Ship From:

MO

(b) (4) St. Louis County, MO, (b) (4)

CONTACT: (b) (4), (b) (6), (b) (7)(C) (b) (4)

St. Louis, MO,

мт

(b)(4)

Yellowstone County, MT,(b) (4)

(b) (4), (b) (6), (b) (7)(C) (b) (4), (b) (6), (b) (7)(C)

ND

(b)(4)

McHenry County, ND, (b) (4)

CONTACT: (b)(4), (b)(6), (b)(7)(C) ND, (b)(4), (b)(6), (b)(7)(C)

Monsanto Reference ID
2000-78XRAB

Ship To:

MO

(b) (4)

St. Louis County, MO, (b) (4)

CONTACT (b) (4), (b) (6), (b) (7)(
(b) (4)

MT

(b) (4)

Yellowstone County, MT, (b) (4)

CONTACT (b) (4), (b) (6), (b) (7)(C)

ND

(b)(4)

ND, (b) (4)

CONTACT: (b)(4),(b)(6),(b)(7)(C)

Monsanto Reference ID

2000-78XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

MT (1), ND (1)

MT

(b) (4)

Yellowstone County, MT, USA, 3 acres.

 $\begin{array}{l} \text{DESPONICIBLE DEDSON/RESEARCHER} \\ \text{(b) (4), (b) (6), (b) (7)(C)} \\ \text{(b) (4), (b) (6), (b) (7)(C)} \end{array}$

ND

(b) (4), (b) (6), (b) (7)(C)

McHenry County, ND, 3 acres.

RESPONSIBLE PERSON/RESEARCHER: 1D, (b) (4), (b) (6), (b) (7)(C) (b) (4), (b) (6), (b) (7)(C)



CBIOELETED

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-78XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best re are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 04, 2000

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

February 8, 2000

Dear Mr. Brown:

Enclosed is notification 00-038-19n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-038-19n

Applicant #: 2000-78XRAB

Received:

February 7, 2000

Effective: March 8, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO MT ND

Release destination: MT ND

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOTIFICATION
State concurs with APHIS determination.
State DOES NOT CONCUR and offers the following reasons:
Name of State official:
Signature:
Date:
State:Rptloc01/R4

Dr. Gary Gingery, Administrator Agriculture Sciences Division Montana Department of Agriculture P.O. Box 200201 Helena, MT 59620-0201

February 8, 2000

Dear Dr. Gingery:

Enclosed is notification 00-038-19n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

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Institution: Monsanto

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Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION
State concurs with APHIS determination.
State DOES NOT CONCUR and offers the following reasons:
Name of State official:
Signature:
Date:
State: Rptloc01/R4

Mr. David R. Nelson, State Entomologist North Dakota Department of Agriculture 600 East Boulevard, 6th Floor Bismarck, ND 58505-0020

February 8, 2000

Dear Mr. Nelson:

Enclosed is notification 00-038-19n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-038-19n

Applicant #: 2000-78XRAB

Received:

February 7, 2000

Effective:

March 8, 2000

Institution: Monsanto

Recipient:

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Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

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State concurs with A	PHIS determination.
State DOES NOT CONCU	R and offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Animat and Plant Health Inspection Service

4700 River Road Riverdale, MD -20737

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

February 8, 2000

Dear Mr. Brown:

Enclosed is notification 00-038-19n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-038-19n

Applicant #: 2000-78XRAB

Received:

February 7, 2000 Effective:

March 8, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO MT ND Release destination:

MT ND

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It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOTIFICATION	10
State concurs with APHIS determination.	<u> </u>
State DOES NOT CONCUR and offers the following reasons:	
Name of State official Michael & Bown	Name
$_{\text{Signature:}}$ (b) (6), (b) (7)(C)	Signa
Date: 2/16/00	Date:
State: MO Rptloc01/R4	State

FEB 18 191



An Equal Coporturity Employee



Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD -20737



Dr. Gary Gingery, Administrator Agriculture Sciences Division Montana Department of Agriculture P.O. Box 200201 Helena, MT 59620-0201

February 8, 2000

Dear Dr. Gingery:

Enclosed is notification 00-038-19n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bo number

00-038-19n

Applicant #: 2000-78XRAB

Received:

February 7, 2000

Effective:

March 8, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO MT ND

Release destination:

MT ND

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

ce. R. Stoaks, PPQ, Sacramento, CA

· · · ·	
STATE RESPONSE TO	NOTIFICATION
State concurs with APHIS determinati	
State conduis with APRIS determinati	on.
State DOES NOT CONCUR and offers the	
Name of State official. Jori M. With	10101
Name of State (b) (b) (7)	arre
$_{\text{Signature:}}$ (b) (6), (b) (7)(C)	
Date: 2/16/00	10.
State: Montana	Ppt1oc01/P4



FEB 1 6 2000

Animal and Plant Health Inspection Service

· 4706 River Road Riverdale, MO 20737

Mr. David R. Nèlson, State Entomologist North Dakota Department of Agriculture 600 East Boulevard, 6th Floor Bismarck, ND 58505-0020

February 8, 2000

Dear Mr. Nelson:

Enclosed is notification 00-038-19n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-038-19n

Applicant #: 2000-78XRAB

Receivéd:

February 7, 2000

March 8, 2000 Effective:

Institution: Monsanto

Wheat Recipiént:

Interstate destination: MO MT ND

MT ND Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that AFHIS provide an acknowledgement within 30 days of receipt.

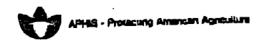
Sincerely,

E. Diarme Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

cc: D. DeWeese, PPQ, Jefferson City, MO

Enclosure

r market
STATE RESPONSE TO NOTIFICATION
State concurs with APHIS determination.
State DOES NOT CONCUR and offers the following reasons:
Name of State Official. DAVA RNETUS 7
Name of State Official: Au A A A COLOR TO Signature: (b) (6), (b) (7)(C)
Date: 2/14/00
State: Rptloc01/R4



An Equal Opportunity Employer

FEB 1 5 2000

February 28, 2000

(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear



Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 8, 2000.

Interstate movement and Release Notification no. 00-038-19n (2000-78XRAB) Regulated article - Wheat Destinations - Missouri, Montana, North Dakota

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- M. Brown, Missouri Dept. of Agric., Jefferson City, MO
- G. Gingery, Montana Dept. of Agric., Helena, MT
- D. Nelson, North Dakota Dept. of Agric., Bismarck, ND
- D. DeWeese, PPQ, SCR, Jefferson City, MO
- R. Stoaks, PPQ, WR, Sacramento, CA
- File number 00-038-19n

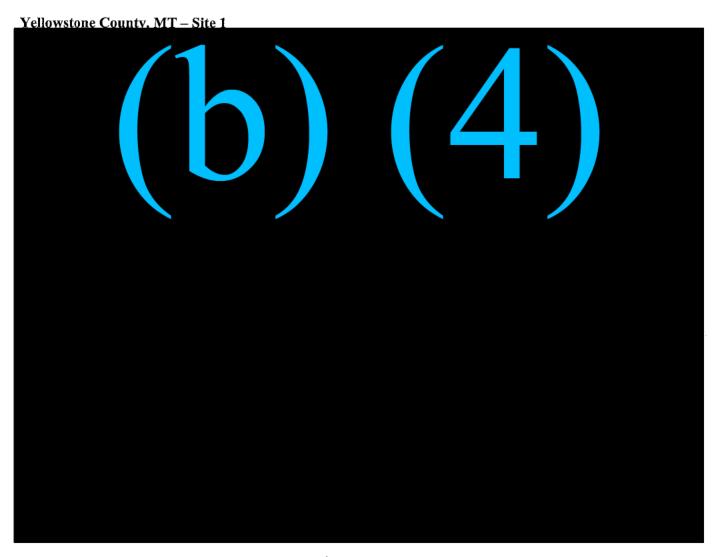
2000 Wheat Field Trial Report USDA # 00-038-19n Monsanto # 2000-78XRAB

May 13, 2001

Biotech Field Compliance Team Monsanto Company

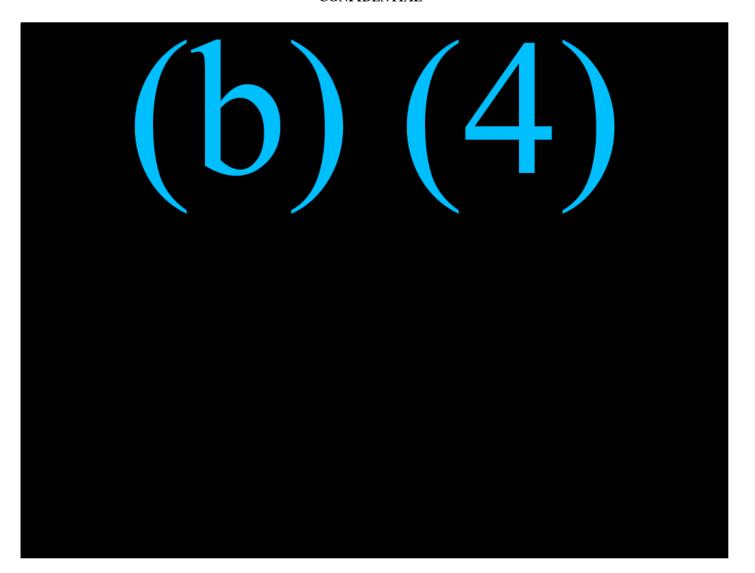
Location Site 1 Site 2 County Yellowstone McHenry

State MT ND



McHenry County, ND - Site 2





CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, <u>Critical Mass Energy Project v. NRC</u>, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

2000 Wheat Field Trial Report USDA # 00-038-19n Monsanto # 2000-78XRAB

May 13, 2001

Biotech Field Compliance Team Monsanto Company

Location
Site 1
Site 2

County Yellowstone McHenry

State MT ND

Yellowstone County, MT – Site 1 Planting Date: May 16, 2000 Harvest Date: August 15, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391; PV-TXGT12 line 33512

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

General Results of Field trial: [CBI deleted]

McHenry County, ND – Site 2 Planting Date: May 19, 2000 Harvest Date: August 23, 2000 Destruct Date: September 1, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391; PV-TXGT12, line 33512

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

Final Disposition of Plot Area after Harvesting: [CBI deleted]

OR120018_BR_004602

Page I of 1

Monsanto # 2000-78XRAB

General Results of the Field Trial: [CBI deleted]

2000 Wheat Field Trial Report USDA # 00-038-19n Monsanto # 2000-78XRAB

December 7, 2001

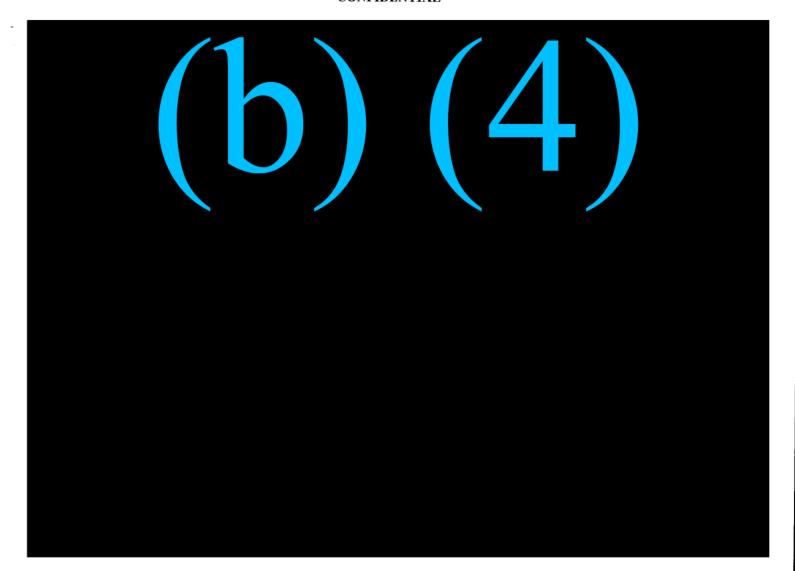
Biotech Field Compliance Team Monsanto Company

Location Site 1 Site 2 County Yellowstone McHenry

State MT

ND





2000 Wheat Field Trial Report USDA # 00-038-19n Monsanto # 2000-78XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1 Site 2

County Yellowstone

State

McHenry

MT ND

Yellowstone County, MT – Site 1 Planting Date: May 16, 2000 Harvest Date: August 15, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391; PV-TXGT12 line 33512

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

General Results of Field trial: [CBI deleted]

McHenry County, ND - Site 2 Planting Date: May 19, 2000 Harvest Date: August 23, 2000 Destruct Date: September 1, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391; PV-TXGT12, line 33512

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Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

Final Disposition of Plot Area after Harvesting: [CBI deleted]

OR120018 BR 004606 Page T of I Monsanto # 2000-78XRAB

General Results of the Field Trial: [CBI deleted]

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Notification Tracking Sheet

Bp number: 00-038-20n

2000-79XRAB App number: Begin movement: 2/04/00 Received: 2/07/00 End movement: 2/03/01 Institution: Monsanto Begin release: 2/04/00 Recipient: Wheat End release: 2/03/01 Status: Pending Acre: Effective date: 3/08/00 CBI status: CBI Phenotype: HT - Glyphosate tolerant Comments: Resp person: Hunter, Priscilla E. Parsed name: Ms. Priscilla E. Hunter Compliance Specialist Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield, MO 63198 Telephone: 636-737-6032 Fax: 636-737-7085 _______ Initial Date [\(\sigma \) Assign Bp number and initial data entry [2/9/00]* Review by biotechnologist [/] Letter of notification to State Fed - CX [] State response O/d Loc Site Reg Interstate *Dest*MO *SCR * Interstate *Dest*ND *SCR * Interstate *Orig*MO *SCR * Interstate *Orig*ND *SCR * Release *ND 1*SCR * [1 Enter genes into database /Letter of (acknowledgement) denial/withdraw 6. Enter final data into database



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 04, 2000

Monsanto Reference ID

2000-79XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-038-20n

1. USDA Reference Number

2. Applicant Reference Number 2000-79XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Phone

(b) (6), (b) (7)(C)

FAX EMail

636/737-7085

b) (6), (b) (7)(C) monsanto.com

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 04, 2000

- February 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite and Backcross progeny from Bobwhite and local breeding lines.

Monsanto Reference ID

2000-79XRAB

designation of transformed line:

line 33391

Constructs: PV-TXGT10

GENE OF INTEREST



Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST



Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-79XRAB

designation of transformed line:

line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [(b) (4) - CBI

СВІ

CBI

Gene: CTP7-CP4 -- [

(b) (4)

(b) (4) - CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- (b) (4)
(b) (4)

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- (b) (4)

CBI

20	ററ-	79	ΧĦ	AB
20	vv-	10	ΛГ	MD

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

MO, ND

MO, ND

Ship From:

MO



ND

(b) (4) Cass County, ND (b) (4)

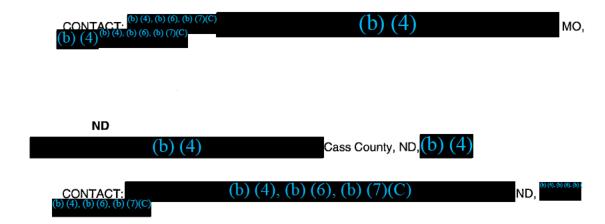


Ship To:

MO
(b) (4)
St. Louis County, MO(b) (4)

Monsanto Reference ID

2000-79XRAB



Monsanto Reference ID

2000-79XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

ND (1)

(b) (4) Cass County, ND, USA, 3 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C)ND, 58105, (b) (4), (b) (6), (c) (7)(C)

(b) (4), (b) (6), (b) (7)(C)

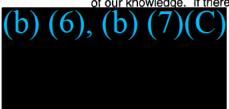


MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-79XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 04, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (10th Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-79XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000

http://www.monsanto.com

Monsanto Reference ID

2000-79XRAB

Permit Unit

February 04, 2000

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-038-20n

- 1. USDA Reference Number
- 2. Applicant Reference Number 2000-79XRAB
- 3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Phone

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

63198

FAX EMail

b) (6), (b) (7)(C) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

MO

February 04, 2000

February 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite and Backcross progeny from Bobwhite and local breeding lines.

Monsanto Reference ID

2000-79XRAB

designation of transformed line: line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-79XRAB

designation of transformed line: line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

CBI Promoter: CMP 3/I5 -- [CBI Deleted]

CBI Gene: CTP7-CP4 -- [CBI Deleted]

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI Promoter: MP4 -- [CBI Deleted]

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

CBI Terminator: M1 -- [CBI Deleted]

2000-79XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

MO, ND

MO, ND

Ship From:

MO



ND

(b)(4)

Cass County, ND, (b) (4)



Ship To:

MO
(b) (4)
St. Louis County, MO, (b) (4)

Monsanto Reference ID

2000-79XRAB



Monsanto Reference ID

2000-79XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

ND (1)

ND

(b) (4), (b) (6), (b) (7)(C)

Cass County, ND, USA, 3 acres.

RESPONSIBLE PERSON/RESEARCHER (b) (4), (b) (6), (b) (7)((b) (4), (b) (6), (b) (7)(C) (b) (4), (b) (6), (b) (7)(C)



MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
St. Louis, Missouri 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-79XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best re any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 04, 2000

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
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February 04, 2000

Monsanto Reference ID

2000-79XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-038-20n

1. USDA Reference Number

2. Applicant Reference Number 2000-79XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Phone

(b) (6), (b) (7)(C

FAX EMail 636/737-7085

b) (6), (b) (7)(C)@monsanto.com

700 Cheserfield Parkway North

-

Monsanto Company

St. Louis

63198

4. Duration of Introduction

Interstate Movement and Release

MO

February 04, 2000

February 03, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite and Backcross progeny from Bobwhite and local breeding lines.

Page 1 of 7

Monsanto Reference ID

2000-79XRAB

designation of transformed line:

line 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] **CBI**

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana CPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-79XRAB

designation of transformed line:

line 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted]

CBI

Gene: CTP7-CP4 -- [C Deleted]

CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted]

CBI

2000-79XRAB 7. Mode of Transformation Disarmed Agrobacterium tumefaciens Interstate Movement and Release 8. Introduction Ship up to 1000 pounds of wheat seed to and from each location. ORIGIN: **DESTINATION:** MO, ND MO, ND Ship From: MO St. Louis County, MO, (b) (4) ND (b)(4)Cass County, ND, (b) (4)

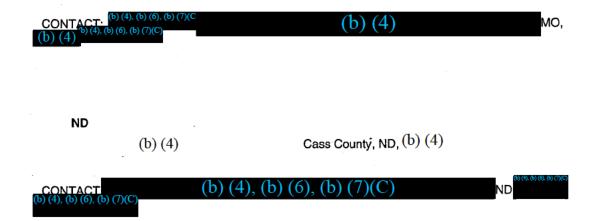
Ship To:

Monsanto Reference ID

MO (b) (4) St. Louis County, MO(b) (4)

Monsanto Reference ID

2000-79XRAB



Monsanto Reference ID

2000-79XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

ND (1)

ND

(b)(4)

Cass County, ND, USA, 3 acres.

DESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C) (D, (b) (4), (b) (6), (b) (b) (4), (b) (6), (b) (7)(C)

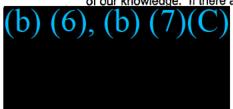
Page 6 of 7

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-79XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 04, 2000 Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

February 8, 2000

Dear Mr. Brown:

Enclosed is notification 00-038-20n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-038-20n

Applicant #: 2000-79XRAB

Received:

February 7, 2000

Effective:

March 8, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO ND

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOTIFICA	TION
State concurs with APHIS determination.	
State DOES NOT CONCUR and offers the following	.ng reasons:
Name of State official:	
Signature:	
Date:	
State: Potlog	•01 /P4

Mr. David R. Nelson, State Entomologist North Dakota Department of Agriculture 600 East Boulevard, 6th Floor Bismarck, ND 58505-0020

February 8, 2000

Dear Mr. Nelson:

Enclosed is notification 00-038-20n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-038-20n

Applicant #: 2000-79XRAB

Received:

February 7, 2000

Effective:

March 8, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO ND Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

•	
STA	ATE RESPONSE TO NOTIFICATION
State concurs with A	PHIS determination.
State DOES NOT CONCU	R and offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD -20737

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

February 8, 2000

Dear Mr. Brown:

Enclosed is notification 00-038-20n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-038-20n

Applicant #: 2000-79XRAB

Received:

February 7, 2000 Effective:

March 8, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO ND Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

E. Dianne Hatmaker, Chier Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

	STATE RESPO	ONSE TO NOTIFICATION ·
State	concurs with APHIS dete	ermination.
State	DOES NOT CONCUR and, off	ers the following reasons:
Name of State official.		
Signature:	(0)(0),(0)	(/)(C)
Date: 2	16/00	
State:	ho .	Rptloc01/R4

FEB 18



An Equal Opportunity Employer



Animal and Plant Health Inspection Service

4700 River Road Riverdale, MD -20737

Mr. David R. Nelson, State Entomologist North Dakota Department of Agriculture 600 East Boulevard, 6th Floor Bismarck, ND 58505-0020

February 8, 2000

Dear Mr. Nelson:

Enclosed is notification 00-038-20n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-038-20m

Rffective:

Applicant #: 2000-79XRAB

Receivéd:

February 7, 2000

March 8, 2000

Institution: Monganto

Recipient:

Wheat

Interstate destination: MO ND

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

. Diamne Hatmaker, Chier Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOTIFICATION
State concurs with APHIS determination.
State DOES NOT CONCUR and offers the following reasons:
Name of State Official: DAVID R. NECJC 17
Signature (b) (6), (b) (7)(C)
Date: 2/14/00
State: Rptloc01/R4

PHS - Protecting American Agriculture

An Equal Opportunity Employer

FEB 1 5 2000

February 28, 2000

monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been acknowledged and may be executed according to 7 CFR 340.3(c), effective on or after March 8, 2000.

Interstate movement and Release Notification no. 00-038-20n (2000-79XRAB) Regulated article - Wheat Destinations - Missouri, North Dakota

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently

This acknowledgment does not authorize use of "challenge organisms" for field

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

M. Brown, Missouri Dept. of Agric., Jefferson City, MO D. Nelson, North Dakota Dept. of Agric., Bismarck, ND

D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-038-20n

2000 Wheat Field Trial Report USDA #000058-2011 Monsanto # 2000-79XRAB

(b) (6), (b) (7)(C)

June 6, 2001 **Monsanto Company**

Location **Prosper Research Farm** **County** Cass

State

ND

Cass County, ND

2000 Wheat Field Trial Report Monsanto # 2000-79XRAB USDA # 00-038-20n

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1

County Cass

State ND

Cass County, ND

2000 Wheat Field Trial Report USDA # 00-038-20n Monsanto # 2000-79XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1

County

State

Cass

ND

Cass County, ND

Planting Date: May 17, 2000 Harvest Date: August 21, 2000 Destruct Date: August 25, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, Line 33391; PV-TXGT12, line 33512

Purpose of trial:

[CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area after Harvesting: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

General Results of Field Trial: [CBI deleted]

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, <u>Critical Mass Energy Project v. NRC</u>, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

Notification Tracking Sheet

Bp number: 00-039-05n

App number: 2000-83XRAB Begin movement: 2/07/00 Received: 2/08/00 End movement: 2/06/01 Institution: Monsanto Begin release: 2/07/00 Recipient: Wheat End release: 2/06/01 Status: Pending Acre: 15.00 Effective date: 3/09/00 CBI status: CBI HT - Glyphosate tolerant Phenotype: Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip: Chesterfield, MO Telephone: (b) (6), (b) (7)(**C** Fax: 636-737-7085 Initial [Assign Bp number and initial data entry 2. Review by biotechnologist a 12/10/00* [] Letter of notification to State Fed-ex 3. [] State response O/d Loc Site Reg Interstate *Dest*KS * *SCR * Interstate *Dest*MT *WR * Interstate *Orig*KS *SCR * Interstate *Orig*MT *WR Release *MT 3*WR [1 [1/] Enter genes into database 6. Letter of acknowledgement/denial/withdraw Enter final data into database 7.



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-83XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-05n

- 1. USDA Reference Number
- 2. Applicant Reference Number 2000-83XRAB
- 3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Compliance Specialist

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail (0) (0), (0) (1)(

636/737-7085

(b) (6), (b) (7)(C) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

CBI

Monsanto Reference ID

2000-83XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2-- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- (b) (4) - CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI

Monsanto Reference ID

2000-83XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- (b) (4) CBI

Gene: CTP7-CP4-- (b) (4) (b) (4)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- I

(b) (4)

(b) (4)

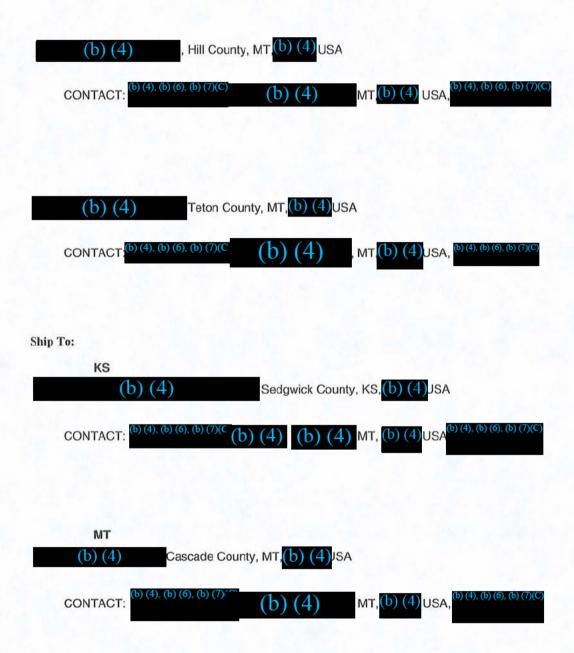
Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: M1 -- (b) (4) (CBI

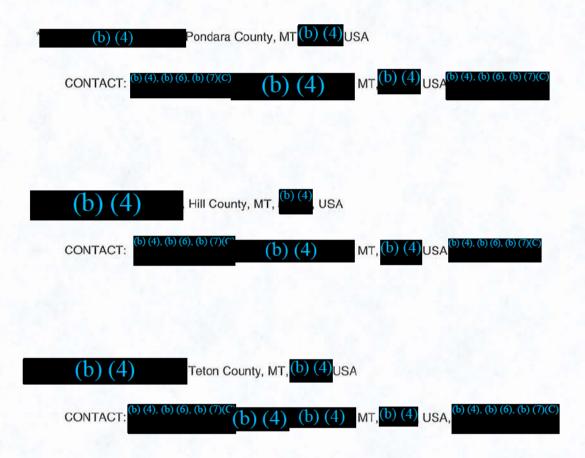
Monsanto Reference ID 2000-83XRAB 7. Mode of Transformation Disarmed Agrobacterium tumefaciens Interstate Movement and Release 8. Introduction Ship up to 1220 pound of wheat seed to and from each location. ORIGIN: **DESTINATION:** KS, MT KS, MT Ship From: KS Sedgwick County, KS, (b) (4) USA CONTACT: MT Cascade County, MT, (b)(4)USA CONTACT Pondara County, MT(b) (4) USA

CONTACT: (b) (4), (b) (6), (b) (7)(0

Monsanto Reference ID 2000-83XRAB



Monsanto Reference ID 2000-83XRAB



Monsanto Reference ID 2000-83XRAB Release Site: NUMBER OF STATES/TERRITORIES AND SITES: MT (3) MT (b) (4)Pondara County, MT, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: USA(b) (4), (b) (6), (b) (7)(C) (b) (4) Hill County, MT, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: USA(6) (4), (6) (6), (6) (7)(C) Teton County, MT, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER:



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-83XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 07, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (lOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-83XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-83XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-05n

- 1. USDA Reference Number
- 2. Applicant Reference Number 2000-83XRAB
- 3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Phone FAX

EMail

Monsanto Company

700 Cheserfield Parkway North

St. Louis

63198

636/737-7085

b) (6), (b) (7)(C)@monsanto.com

4. Duration of Introduction

Interstate Movement and Release

MO

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-83XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-83XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [CBI Deleted] CBI

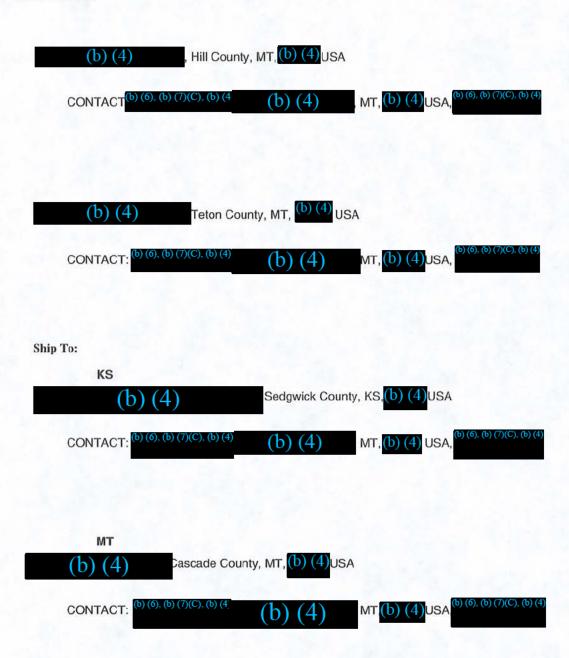
Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

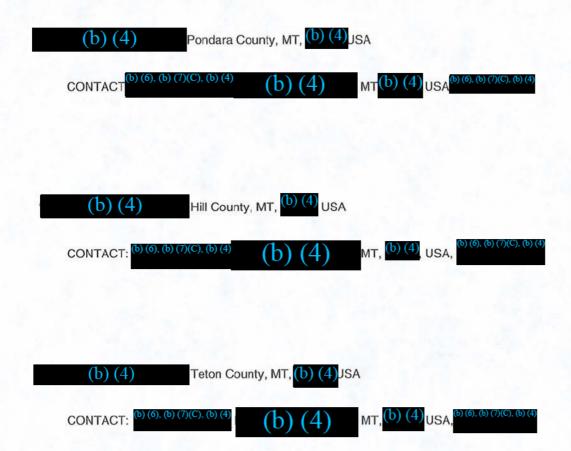
Monsanto	Reference	ID
2000-83X	CRAB	

7. Mode of Transformation	Disarmed Agrobacterium tumefaciens
8. Introduction	Interstate Movement and Release
Ship up to 1220 pound of whe	eat seed to and from each location.
ORIGIN:	DESTINATION:
KS, MT	KS, MT
Ship From:	
KS	
(b) (4)	Sedgwick County, KS, (b) (4)USA
CONTACT: (b) (6), (b) (7)(C)	$(b) (4) \qquad \text{MT}(b) (4), \text{USA}, (b) (6), (b) (7)(C), (b) (4)$
MT	ada Cauratu MT (IN (A) LICA
(b) (4) Casca	ade County, MT,(b) (4) USA
CONTACT: 1 ^(b) (6), (b) (7)(C	(b) (4) (b) (4) $(b) (4) USA, a^{(b) (6), (b) (7)(C), (b) (4)}$
(b) (4)	ondara County, M7(b) (4) USA
CONTACT: (b) (6), (b) (7)(C)	(b) (4) $MT_{b}(b)$ (4) $MSA_{b}(b)$ (6) (6) (7)(C), (6) (4)

Monsanto Reference ID 2000-83XRAB



Monsanto Reference ID 2000-83XRAB



Monsanto Reference ID 2000-83XRAB Release Site: NUMBER OF STATES/TERRITORIES AND SITES: MT (3) MT Pondara County, MT, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: USA, (b) (6), (b) (7)(C), (b) (4) Hill County, MT, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: Teton County, MT, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: USA, (0) (6), (0) (7)(C), (0) (4)





MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-83XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000





MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-83XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-05n

63198

1. USDA Reference Number

2. Applicant Reference Number 2000-83XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

uis MO

Juration of introduction

Phone

FAX EMail (b) (6), (b) (7)(C)

636/737-7085 (b) (6), (b) (7)(C

monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

wileat, Title

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-83XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-83XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-83XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1220 pound of wheat seed to and from each location.

ORIGIN:

DESTINATION:

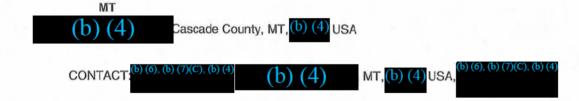
KS, MT

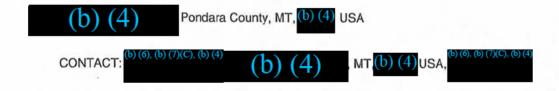
KS, MT

Ship From:

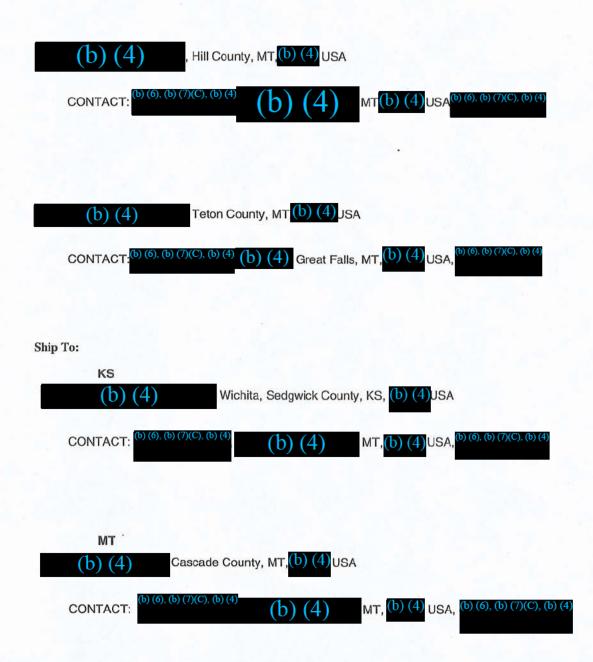
KS



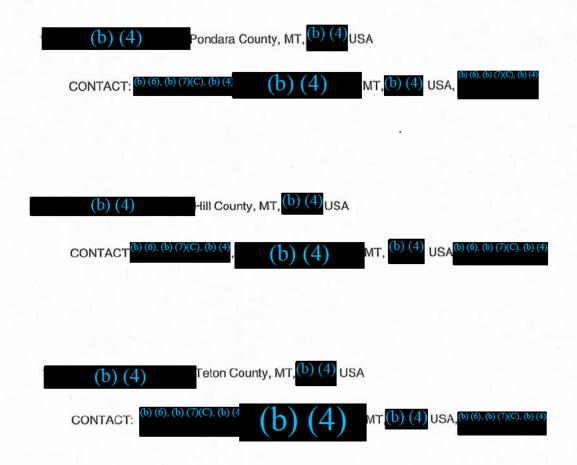




Monsanto Reference ID 2000-83XRAB



Monsanto Reference ID 2000-83XRAB



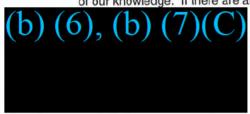
Monsanto Reference ID 2000-83XRAB Release Site: NUMBER OF STATES/TERRITORIES AND SITES: MT (3) MT (b) (4) Pondara County, MT, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: USA, 10 (0) (0) (0) (0) (0) MT,(b)(4)Hill County, MT, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: USA(b) (6), (b) (7)(C), (b) (4) Teton County, MT, USA, 5 acres. (b) (4) RESPONSIBLE PERSON/RESEARCHER:

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-83XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000 Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-05n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-05n

Applicant #: 2000-83XRAB Effective: March 9, 2000

Received:

February 8, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS MT

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianno Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

CHARL D	EGDONGE EG NOETETGEETON
STATE R	ESPONSE TO NOTIFICATION
State concurs with APHIS	determination.
State DOES NOT CONCUR and	offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Dr. Gary Gingery, Administrator Agriculture Sciences Division Montana Department of Agriculture P.O. Box 200201 Helena, MT 59620-0201

February 8, 2000

Dear Dr. Gingery:

Enclosed is notification 00-039-05n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-05n

Applicant #: 2000-83XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS MT

Release destination: MT

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/g/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RE	SPONSE TO NOTIFICATION
State concurs with APHIS de	etermination.
State DOES NOT CONCUR and	offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rpt 1 oc 01 /R4

Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD 20737

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-05n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-05n

Applicant #: 2000-83XRAB

Received:

February 8, 2000

Effective:

March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS MT

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7-CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE	RESPONSE TO NOTIFICATION
State concurs with APHIS	determination. State counst evalue provided information.
State DOES NOT CONCUR an	d offers the following reasons:
Name of State official: Them	as Sim II
Signature: (b) (6), (b) (7)(C)	
Date: 2/24/00	
	* 18, x
State: Kansas	Rptloc01/R4



Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD -20737



Dr. Gary Gingery, Administrator Agriculture Sciences Division Montana Department of Agriculture . P.O. Box 200201 Helena, MT 59620-0201

February 8, 2000

Dear Dr. Gingery:

Enclosed is notification 00-039-05n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-05n

Applicant #: 2000-83XRAB

Received:

February 8, 2000

Effective:

March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS MT Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7-CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPO, Sacramento, CA

STATE RESE	ONSE TO NOTIFICATION
State concurs with APHIS det	ermination.
State DOES NOT CONCUR and of	
Name of State official: Lori M	Witham
Signature: (b) (6), (b) (7)	(C) ·
Date: 2/16/00	gi.
State: Montana	Rptloc01/R4

March 9, 2000

(b) (6), (b) (7)(C)

Monsanto company 700 Chesterfield Parkway N St. Louis, MO 63198

Dear



Your notification request has been acknowledged and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-05n (2000-83XRAB) Regulated article - Wheat Destinations - Kansas, Montana

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- T. Sim, Kansas State Board of Agric., Topeka, KS
- G. Gingery, Montana Dept. of Agric., Helena, MT
- R. Stoaks, PPQ, WR, Sacramento, CA
- D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-039-05n

Confirmation Report-Memory Send

: Mar-09-00 02:39pm Time

Tel line 1: Tel line 2: Name

Job number

: 810

Date

: Mar-09 02:38pm

To

: 916367377085

Document Pages

: 01

Start time

: Mar-09 02:38pm

End time

: Mar-09 02:39pm

Pages sent

: 01

Job number

: 810

*** SEND SUCCESSFUL ***



Animai and Plant Health Inspection Service

4700 River Road Riverdate, MD 20737

March 9, 2000

(b) (6), (b) (7)(C)

Monsanto company 700 Chesterfield Parkway N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been $\frac{acknowledged}{according}$ and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-05n (2000-81XERB) Regulated article - Wheat Destinations - Kansas, Montana

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field Test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

sincerely

Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

T. Sim, Kansas State Board of Agric., Topeka, K G. Gingery, Nontana Dept. of Agric., Helena, MT R. Stoaks, PPQ, WR, Sacramento, CA D. DeWeese, PPQ, SCR, Jefferson City, MO



An бідма Орражынну білі

2000 Wheat Field Trial Report USDA # 00-039-05n Monsanto # 2000-83XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1 Site 2

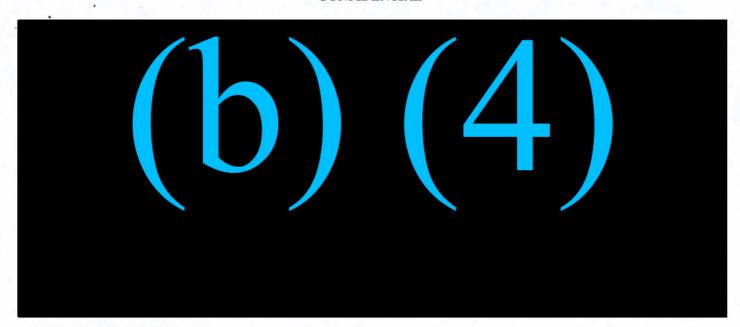
County Pondera Hill Teton State MT MT MT

Site 3 Teton Pondera County, MT - Site 1



Hill County, MT - Site 2



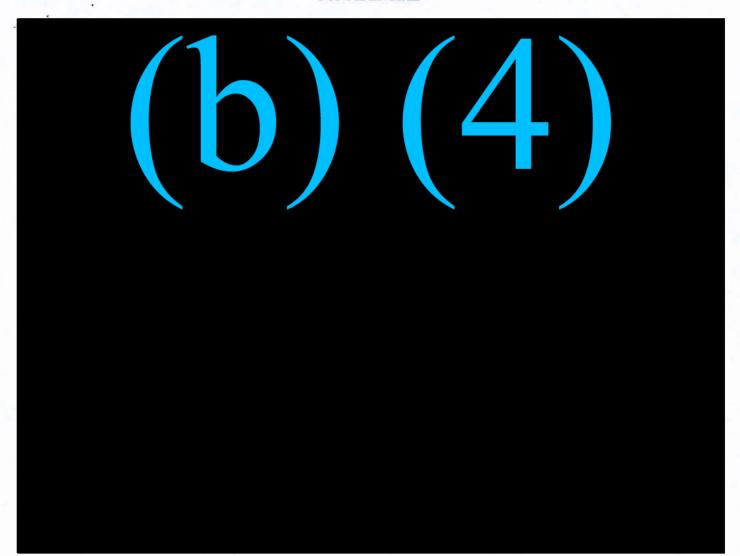


Teton County, MT - Site 3



Teton County, MT - Site 3





CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

Monsanto ID: 2000-83XRAB

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

2000 Wheat Field Trial Report USDA # 00-039-05n Monsanto # 2000-83XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location	County	State
Site 1	Pondera	MT
Site 2	Hill	MT
Site 3	Teton	MT

Pondera County, MT – Site 1 Planting Date: April 28, 2000 Harvest Date: August 24, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT12, line 33512

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Method of Devilitization: [CBI deleted]

General Results of Field Trial: [CBI deleted]

Pondera County, MT – Site 1 Planting Date: April 28, 2000 Harvest Date: August 24, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT12, line 33512

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

OR120018_BR_004685

Page 1 of 3

Disposition of the Harvested Material: [CBI deleted]

General Results of Field Trial: [CBI deleted]

Hill County, MT – Site 2 Planting Date: April 18, 2000

Destruct Date: June 28, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT12, line 33512

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

Teton County, MT – Site 3

Planting Date: April 19, 2000

Destruct Date: June 8, 2000 and July 8, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT12, line 33512

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

Teton County, MT - Site 3

Planting Date: April 19, 2000

Destruct Date: July 8, 2000 and July 8, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT12, line 33512

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

OR120018 BR 004686

USDA #00-039-05n

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area after Harvesting: [CBI deleted]

General Results of Trial: [CBI deleted]

Bp number: 00-039-06n

App number: 2000-84XRAB Begin movement: 2/07/00 Received: 2/08/00 End movement: 2/06/01 Institution: Monsanto Begin release: 2/07/00 Recipient: Wheat End release: 2/06/01 Status: Pending Acre: 15.00 Effective date: 3/09/00 CBI status: CBI Phenotype: HT - Glyphosate tolerant Comments: Resp person: Parsed name: Monsanto Company Address1: Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip: Chesterfield, MO Telephone: Fax: 636-737-7085 ______ Initial [Assign Bp number and initial data entry [XEH]* [2/9/60]* Review by biotechnologist [2/10/0a* Letter of notification to State Fed-ex 3. [] State response O/d Loc Site Reg Interstate *Dest*ID *WR [Interstate *Dest*KS *SCR * [Interstate *Dest*WA *WR Interstate *Orig*ID *WR Interstate *Orig*KS *SCR * Interstate *Orig*WA *WR Release *ID 2*WR Release *WA 1*WR Enter genes into database 6. Letter of acknowledgement/denial/withdraw 7. Enter final data into database



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-84XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-06n

1. USDA Reference Number

2. Applicant Reference Number 2000-84XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone (b) (6), (b)

FAX

EMail

636/737-7085

(b) (6), (b) (7)(C)@monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

CBI

Monsanto Reference ID

2000-84XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- (b) (4) (b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/15 -- (b) (4) CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI

CBI

Monsanto Reference ID

2000-84XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/15 -- (b) (4) CBI

Gene: CTP7-CP4 -- (b) (4) (b) (4)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- (b) (4) (CB) (1) (CB)

Monsanto Reference ID

2000-84XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1220 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

ID, KS, WA

ID, KS, WA

Ship From:

ID

(b) (4) Latah County, ID, (b) (4) U.S.A.

CONTACT: (b) (4), (b) (6), (b) (7)(C) , ID, (b) (4), (b) (6), (b) (7)(C)

KS

(b) (4) Sedgwick County, KS, (b) (4) USA

CONTACT (b) (4) Wichita, KS,(b) (4) USA,(b) (4), (b) (6), (b) (7)(C)

WΔ

(b) (4)

Adams County, WA, USA

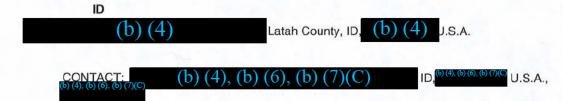
CONTACT: (b) (4), (b) (6), (b) (7)(C)

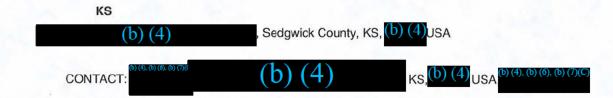
), ^{(6) (4), (6) (6), (6) (7)(C)}U.S.A.,

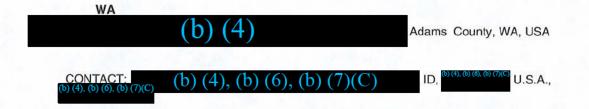
Monsanto Reference ID

2000-84XRAB

Ship To:







Monsanto Reference ID

2000-84XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

ID (2), WA (1)

(b) (4) Latah County, ID, USA, 5 acres.

(b) (4) Latah County, ID, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7) (C)

WA

(b) (4) Adams County, WA, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: $^{(0,0)}_{(0,0)}$ U.S.A $^{(0)}$ (4), (b) (6), (b) (7)(C)



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-84XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 07, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (10th Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-84XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

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Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.

Monsanto ID: 2000-84XRAB

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Monsanto ID: 2000-84XRAB

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MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-84XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-06n

1. USDA Reference Number

2. Applicant Reference Number 2000-84XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail

X

636/737-7085

b) (6) (b) (7)(

b) (6), (b) (7)(C)_{@monsanto.com}

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-84XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-84XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-84XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1220 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

ID, KS, WA

ID, KS, WA

Ship From:

ID

(b)(4)

Latah County, ID,

(b) (4) J.S.A.

 $(b) \stackrel{\text{CONTACT}}{(b)} \stackrel{\text{(h)}}{(b)} \stackrel{\text{(h)}}{($

U.S.A.,

KS

(b) (4)

Sedgwick County, KS, (b) (4) USA

CONTACT:

t

b) (4)

KS, (b) (4) USA

(b) (4), (b) (6), (b) (7)(C

WA

(b)(4)

Adams County, WA, USA

(b) (4), (b) (6), (b) (7)(C)

b) (4), (b) (6), (b) (7)(C)

U.S.A.,

Monsanto Reference ID 2000-84XRAB Ship To: ID (b)(4)(b) (4) _atah County, ID, J.S.A. U.S.A., KS Sedgwick County, KS, 67204, USA CONTACT: KS, (b) (4) USA WA (b)(4)Adams County, WA, USA .S.A.,

Monsanto Reference ID

2000-84XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

ID (2), WA (1)

ID

(b)(4)

Latah County, ID, USA, 5 acres.

(b) (4), (b) (6), (b) (7)(C)

(b) (4), (b) (6), (b) (7)(C) Latah County, ID, USA, 5 acres.

WA

(b)(4)

Adams County, WA, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER (b) (4), (b) (6), (b) (7)(C)





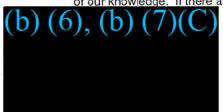
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-84XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000



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St. Louis, Missouri 63198
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February 07, 2000

Monsanto Reference ID

2000-84XRAB

Permit Unit

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700 Cheserfield Parkway North

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MO

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Interstate Movement and Release

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-84XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

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Monsanto Reference ID

2000-84XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

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Disarmed Agrobacterium tumefaciens

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Ship up to 1220 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

ID, KS, WA

ID, KS, WA

Ship From:

ID

(b)(4)

Latah County, ID, (b) (4) U.S.A.

(b) (6), (b) (7)(C), (b) (4)

(b) (4) Sedgwick County, KS, (b) (4) USA

CONTACT: (b) (4) (b) (4) (b) (4) (b) (4) (b) (4) (b) (6) (6) (6) (7) (C) (6) (4)

WA

(b)(4)

Adams County, WA, USA

 $\underset{(b) \ (b), \ (b) \ (7)(C), \ (b) \ (4)}{\text{contact:}} \underbrace{(b) \ (6), \ (b) \ (7)(C), \ (b) \ (4)}_{(b) \ (6), \ (b) \ (7)(C), \ (b) \ (4)} \text{ID}_{(a)}^{(b) \ (6), \ (b) \ (7)(C), \ (b) \ (4)} \text{U.s.a.}$

Monsanto Reference ID 2000-84XRAB Ship To: ID (b)(4)Latah County, ID, (b) (4) U.S.A. CONTACT: b) (6), (b) (7)(C), (b) (4) KS Sedgwick County, KS(b) (4)USA CONTACT: WA (b)(4), Adams County, WA, USA CONTACT: (6), (b) (7)(C), (b) (4)

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ID (2), WA (1)

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RESPONSIBLE PERSON/RESEARCHER ID (0) (0), (0) (7) (0), (0) (4) U.S.A (0) (0), (0) (7) (0), (0) (4) (b) (6), (b) (7)(C), (b) (4)

(b)(4)

Latah County, ID, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHEF ID, (6) (6) (6) (7) (C) (6) (4) F (b) (6), (b) (7)(C), (b) (4)

WA

(b)(4)

Adams County, WA, USA, 5 acres.

RESPONSIBLE PERSON/DESEABOLIER:

(b) (6), (b) (7)(C), (b) (4)

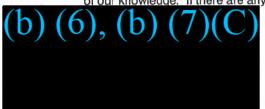


MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-84XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000



MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-84XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-06n

1. USDA Reference Number

2. Applicant Reference Number 2000-84XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail (b) (6), (b) (7)(C)

636/737-7085

(b) (6), (b) (7)(C) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Dr. Rogelio R. Vega Division of Plant Industries Idaho Department of Agriculture 2270 Old Penitentiary Road Boise, ID 83712

February 8, 2000

Dear Dr. Vega:

Enclosed is notification 00-039-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-06n

Applicant #: 2000-84XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: ID KS WA

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

\$ 	STATE RESPONSE TO NOTIFICATION
State	concurs with APHIS determination.
State	DOES NOT CONCUR and offers the following reasons:
Name of State	e official:
Signature:	
Date:	
State:	Rotloc01/R4

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

February 8, 2000

Dear Mr. Wessels:

Enclosed is notification 00-039-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-06n

Applicant #: 2000-84XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient: Wheat

Interstate destination: ID KS WA

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

	STATE RESPONSE TO NOTIFICATION
State	concurs with APHIS determination.
State	DOES NOT CONCUR and offers the following reasons:
Name of State	official:
Signature:	
Date:	
State:	Pptloc01/P4

RECEIVED



Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD 20737

FEB 1 1 2000 PLANT INDUSTRIES

February 8, 2000

Dr. Rogelio R. Vega Division of Plant Industries Idaho Department of Agriculture 2270 Old Penitentiary Road Boise, ID 83712

Dear Dr. Vega:

Enclosed is notification 00-039-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number Received:

00-039-06n

Effective: February 8, 2000

Recipient:

Applicant #: 2000-84XRAB

March 9, 2000 Wheat

Institution: Monsanto

Interstate destination: ID KS WA

Release destination:

ID WA

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7-CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION State concurs with APHIS determination.

State DOES NOT CONCUR and offers the following reasons:

Name of State official:

Rptloc01/R4

APHS - Protecting American Agriculture

- "3

Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD 20737

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-06n

Applicant #: 2000-84XRAB

Received:

February 8, 2000

Effective:

March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: ID KS WA

Release destination:

ID WA

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

S	TATE RESPONSE TO NOTIFICATION	1 1
State concurs with i	APHIS determination.	commot evaluate pride intormation
State DOES NOT CONC	UR and offers the following rea	sons:
Name of State official:	rames Sim II	7
Signature: (b) (6), (b) (7	()(C)	
Date: 2/24/00	194	
. V		
State: Kansus	Rptloc01/R4	



Animal and Plant Health Inspection Service 4700. River Road Riverdale, MD 20737

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street. Olympia, WA 98504-2560

February 8, 2000

Dear Mr. Wessels:

Enclosed is notification 00-039-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number Received:

00-039-06n

Effective:

Applicant #: 2000-84XRAB March 9, 2000

Institution: Monsanto

February 8, 2000

Recipient:

Wheat

Interstate destination: ID KS WA

Release destination: ID WA

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION

State concurs with APHIS determination.

State DOES NOT CONCUR and offers the following reasons:

Name of State

Signature:

State:

Rptloc01/R4

March 9, 2000

(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-06n (2000-84XRAB) Regulated article - Wheat Destinations - Idaho, Kansas, Washington

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- R. Vega, Idaho Dept. of Agric., Boise, ID
- T. Sim, Kansas State Board of Agric., Topeka, KS
- T. Wessels, Washington Dept. of Agric., Olympia, WA
- R. Stoaks, PPQ, WR, Sacramento, CA
- D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-039-06n

Confirmation Report-Memory Send

Time : Mar-09-00 02:35pm

Tel line 1: Tel line 2:

: 805 Job number

Date : Mar-09 02:33pm

To : 916367377085

Document Pages : 01

Start time : Mar-09 02:33pm

End time : Mar-09 02:35pm

: 01 Pages sent

Job number : 805 *** SEND SUCCESSFUL ***

United States Department of Agriculture

Animal and Plant Health Inspection Service

4700 River Road Rivergale, MD 20737

March 9, 2000

(b) (6), (b) (7)(C)

700 Chesterfield Pkwy N St. Louis, MO 63198

beax (b) (6), (b) (7)(C)

Your notification request has been acknowledged and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-06n (2000-84XRAB) Regulated article - Wheat Destinations - Idaho, Kansas, Washington

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E. Dianne Hacmaxer, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

CC: R. Vega, Idaho Dept. of Agric., Boise, ID T. Sim, Kansas State Board of Agric., Topeka, KS T. Wessels, Washington Dept. of Agric., Olympia, WA R. Stoaks, PPQ, WR, Sacramento, CA D. DeWeese, PPQ, 3CR, Jefferson City, MO

APVES - Prosecting Ame

An Equal Opportunity Emplo

2000 Wheat Field Trial Report Draft USDA # 00-039-06n Monsanto # 2000-84XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1 Site 2 Site 3

County State Latah ID Latah ID Adams WA

Latah, ID - Site 1

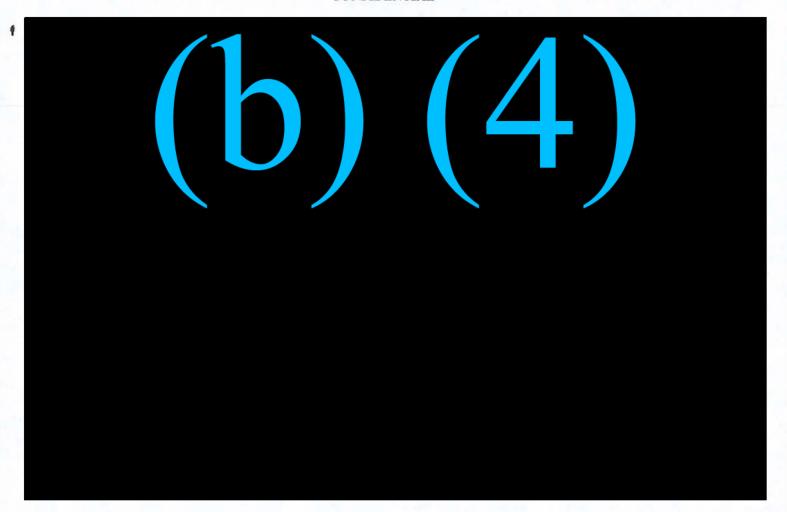


Latah, ID - Site 2



Latah, ID - Site 2





CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.¹

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, <u>Critical Mass Energy Project v. NRC</u>, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

2000 Wheat Field Trial Report Draft USDA # 00-039-06n Monsanto # 2000-84XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location	County	State
Site 1	Latah	ID
Site 2	Latah	ID
Site 3	Adams	WA

Latah, ID - Site 1

Planting Date: May 5, 2000 Harvest Date: August 29, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT 10 line 33391; PV-TXGT12 line 33512

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

General Results of Trial: [CBI deleted]

Latah, ID - Site 2

Planting Date: May 5, 2000 Destruct Date: July 5, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT 10 line 33391; PV-TXGT12 line 33512

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area after Harvesting: [CBI deleted]

Latah, ID - Site 2

Planting Date: May 8, 2000 Destruct Date: July 12, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10 line 33391; PV-TXGT12 line 33512

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area after Harvesting: [CBI deleted]

Adams, WA – Site 3

Planting Date: March 31, 2000

Destruct: June 16, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT 10 line 33391, PV-TXGT12 33512

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Bp number: 00-039-07n

App number: 2000-85XRAB Begin movement: 2/07/00 Received: 2/08/00 End movement: 2/06/01 Institution: Monsanto Begin release: 2/07/00 Recipient: Wheat End release: 2/06/01 Status: Pending Acre: 10.00 Effective date: 3/09/00 CBI status: CBI HT - Glyphosate tolerant Phenotype: Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip: Chesterfield, MO Telephone: (b) (6), (b) (7)(C Fax: 636-737-7085 _____ Initial [V Assign Bp number and initial data entry Review by biotechnologist [Letter of notification to State Fed - ex [] State response 0/d Loc Site Reg Interstate *Dest*KS *SCR *] Interstate *Dest*SD *SCR * 1 Interstate *Orig*KS *SCR * Interstate *Orig*SD *SCR * Rølease *SD 2*SCR *] Enter genes into database Letter of acknowledgement/denial/withdraw Enter final data into database 7.



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-85XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-07n

1. USDA Reference Number

2. Applicant Reference Number 2000-85XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX

EMail

(b) (6), (b) (7)(C)

636/737-7085

(b) (6), (b) (7)(C) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-85XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST



Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI

Monsanto Reference ID

2000-85XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- (b) (4) CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

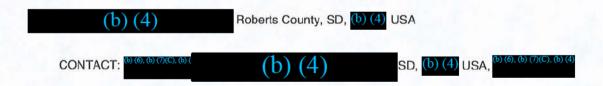
GENE OF INTEREST

Promoter: MP4 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

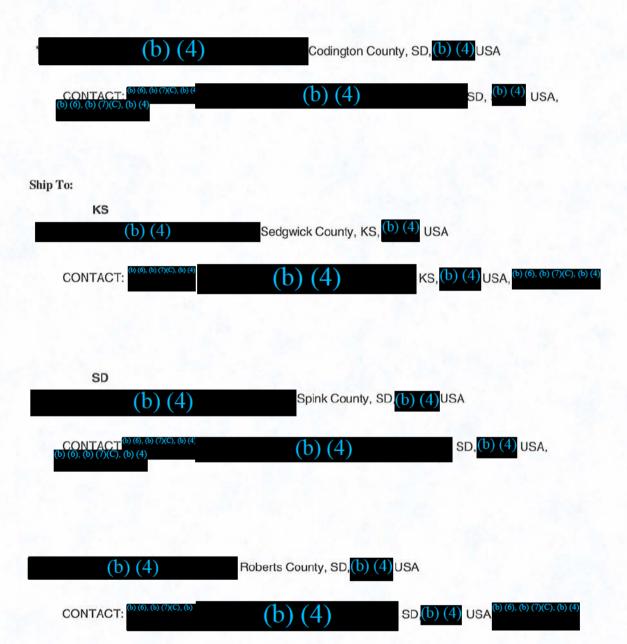
Terminator: M1 -- (b) (4) (CB) (b) (4)

2000-85XRAB 7. Mode of Transformation Disarmed Agrobacterium tumefaciens Interstate Movement and Release 8. Introduction Ship up to 10,000 pounds of wheat seed to and from each location. ORIGIN: DESTINATION: KS, SD KS, SD Ship From: KS Sedgwick County, KS, (b) (4) USA CONTACT SD Spink County, SD, (b) (4) USA CONTACT: (b) (6), (b) (6), (b) (7)(C), (b) (4

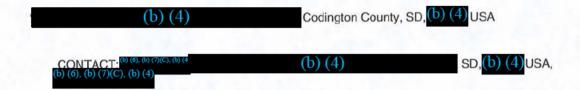


Monsanto Reference ID

Monsanto Reference ID 2000-85XRAB



Monsanto Reference ID 2000-85XRAB



Monsanto Reference ID 2000-85XRAB Release Site: NUMBER OF STATES/TERRITORIES AND SITES: SD (b) (4), (b) (6), (b) (7)(C) Roberts County, SD, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: (b) (6), (b) (7)(C), (b) (4) (b) (4) SD (b) (4) USA (b) (6), (b) (7)(C), (b) (4) (b) (4), (b) (6), (b) (7)(C) Spink County, SD, USA, 5 acres. RESPONSIBLE PERSON/RESEARCHER: (c) (6), (c) (7)(C), (c) (d) (b) (4)

(b) (4) SD,(b) (4) USA,



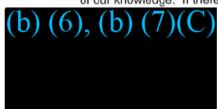
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-85XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (lOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-85XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-07n

- 1. USDA Reference Number
- 2. Applicant Reference Number 2000-85XRAB
- 3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Phone

(b) (6), (b) (7)(C

FAX

636/737-7085

EMail

(b) (6), (b) (7)(C)₂ monsanto.com

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-85XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-85XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-85XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 10,000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

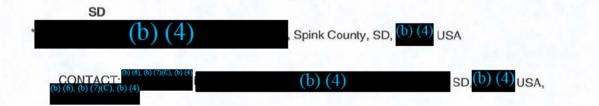
KS, SD

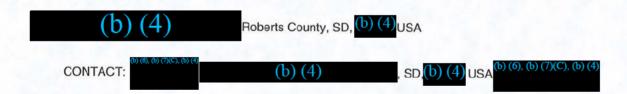
KS, SD

Ship From:

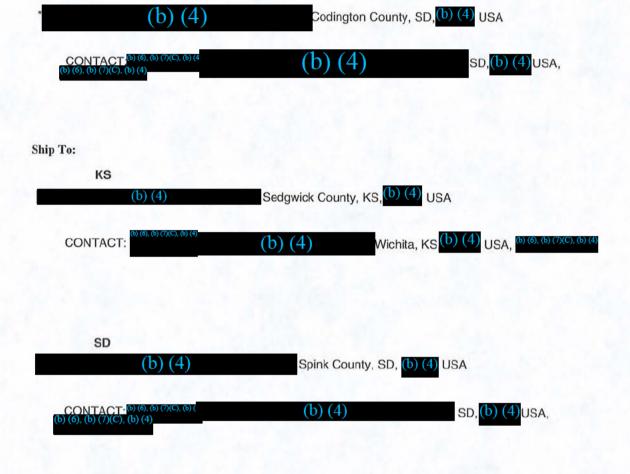
KS

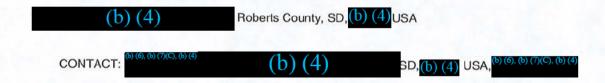




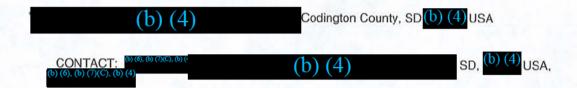


Monsanto Reference ID 2000-85XRAB





Monsanto Reference ID 2000-85XRAB







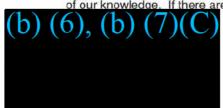
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-85XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000



CBLDELETED

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-85XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-07n

1. USDA Reference Number

2. Applicant Reference Number 2000-85XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Phone

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FAX

636/737-7085

EMail

(b) (6), (b) (7)(C) monsanto.com

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-85XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-85XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference II
2000-85XRAB

7.	Mode	of	Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 10,000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

KS, SD

KS, SD

Ship From:

KS



CONTACT:

(b) (4)

Wichita, KS, (b) (4) USA,

b) (6), (b) (7)(C), (b) (4)

SD



CONTACT: (b) (a) (b) (b) (b) (d) (b) (4) (b) (

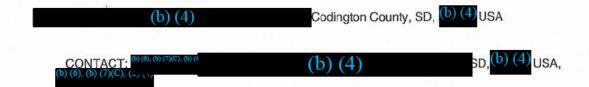
(b) (4) Roberts County, SD, 57279, USA

CONTACT: (b) (4) SD,(b) (4) USA (b) (6), (b) (7)(C), (b) (4)

Monsanto Reference ID 2000-85XRAB



Monsanto Reference ID 2000-85XRAB



Monsanto Reference ID

2000-85XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

SD (2)

SD

(b)(4)

Roberts County, SD, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4) SD(b) (4) USA, (b) (a, b) (7)(C), (b) (4)

(b) (4)

(b) (6), (b) (7)(C), (b) (4) Spink County, SD, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4) USA (b) (6), (b) (7)(C), (b) (1)

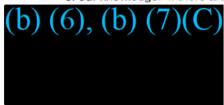
(b) (4)

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-85XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000 Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-07n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number Received: 00-039-07n

Applicant #: 2000-85XRAB Effective: March 9, 2000

February 8, 2000 Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS SD Release destination: SD

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE R	RESPONSE TO NOTIFICATION
State concurs with APHIS	determination.
State DOES NOT CONCUR and	d offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Mr. Kevin Fridley
Division of Agricultural Services
South Dakota Department of Agriculture
Foss Building-523 East Capitol
Pierre, SD 57501-3182

February 8, 2000

Dear Mr. Fridley:

Enclosed is notification 00-039-07n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number 00-039-07n Received: February 8, 2000 Applicant #: 2000-85XRAB Effective: March 9, 2000

Institution: Monsanto

Recipient: Wheat

Interstate destination: KS SD Release destination: SD

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESI	PONSE TO NOTIFICATION
State concurs with APHIS det	termination.
State DOES NOT CONCUR and of	ffers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-07n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-07n

Applicant #: 2000-85XRAB

Received:

February 8, 2000

Effective:

March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS SD

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE	TO NOTIFICATION
State concurs with APHIS determin	Provided Julian In
State DOES NOT CONCUR and offers	the following reasons:
Name of State official: Thomas Sim	<u> </u>
Signature: (b) (6), (b) (7)(C)	
Date: 2/24/00	
State: Kansas	Ppt1oc01/P4



Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD 20737

Mr. Kevin Fridley Division of Agricultural Services South Dakota Department of Agriculture Foss Building-523 East Capitol Pierre, SD 57501-3182

February 8, 2000

Dear Mr. Fridley:

Enclosed is notification 00-039-07n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-07n

Applicant #: 2000-85XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient:

STATE DESPONSE TO MOTTETCATTON

Wheat

Interstate destination: KS SD

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure ·

cc: D. DeWeese, PFQ, Jefferson City, MO



State: South Dakota

Rptloc01/R4

March 8, 2000

(b) (6), (b) (7)(C)

Monsanto company 700 Chesterfield Parkway N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-07n (2000-85XRAB) Regulated article - Wheat Destinations - Kansas, South Dakota

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

CC:

T. Sim, Kansas State Board of Agric., Topeka, KS

K. Fridley, South Dakota Dept. of Agric., Pierre, SD

D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-039-07n

Confirmation Report-Memory Send

Time : Mar-08-00 04:14pm

Tel line 1 : Tel line 2: Name

Job number : 772

Date : Mar-08 04:13pm

To : 916367377085

Document Pages : 02

Start time : Mar-08 04:13pm

End time : Mar-08 04:14pm

Pages sent : 02

Job number : 772

*** SEND SUCCESSFUL ***

Animai and Plant Health Inspector Service

4700 River ROBO Riverdate, MD 20737

March 8. 2000

(b) (6), (b) (7)(**C**

Monsanto company 700 Chesterfield Parkway N 9t. Louis. MO 63198 Dear (b) (6), (b) (7)(C)

Your notification request has been acknowledged and may be executed according to 7 CFR 340.3(c), effective on or after Warch 9, 2000.

Interpretate movement and Release
Notification no. -00-030=1im-(2000-90KRAB)
Regulated article - Wheat
Descinations - Kensas, South Dekota

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers. (Biotechnology).

E. Dianna Harmaker, Chief Blotechnology Program Operations Scientific Services
Plant Protection and Quarantine

Enclosure

r. Sim, Kansas State Board of Agric., Topeka, KS K. Fridley. South Dakota Dept. of Agric., Pierre. SD D. DeWesse, PPQ. SCR. Jefferson City. MO

APPRIL - Proper

Are Brough Copperturery Seri

2000 Wheat Field Trial Report

USDA # 00-039-07n Monsanto # 2000-085XRAB

(b) (6), (b) (7)(C)

June 6, 2001 **Monsanto Company**

Location Sanbokken Farm Wilson Farm

County Roberts Spink

State SD

SD

Roberts County, SD



Spink County, SD



2000 Wheat Field Trial Report USDA # 00-039-07n Monsanto # 2000-085XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1 Site 2 County Roberts Spink

State SD SD

Roberts County, SD - Site 1



Spink County, SD - Site 2



OR120018_BR_004766 Page T of 2



CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

2000 Wheat Field Trial Report USDA # 00-039-07n Monsanto # 2000-085XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

LocationCountyStateSite 1RobertsSDSite 2SpinkSD

Roberts County, SD - Site 1

Planting Date: April 11 and April 24, 2000

Harvest Date: August 2, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT12, line 33512

Purpose of trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the harvested material: [CBI deleted]

Spink County, SD – Site 2 Planting Date: April 12, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33512; PV-TXGT12, line 33391

Purpose of trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

General Results of Field Trial: [CBI deleted]

CONFIDENTIAL

2000 Wheat Field Test Report USDA #00-039-07n Monsanto #2000-85XRAB

> AMENDED December 17, 2002

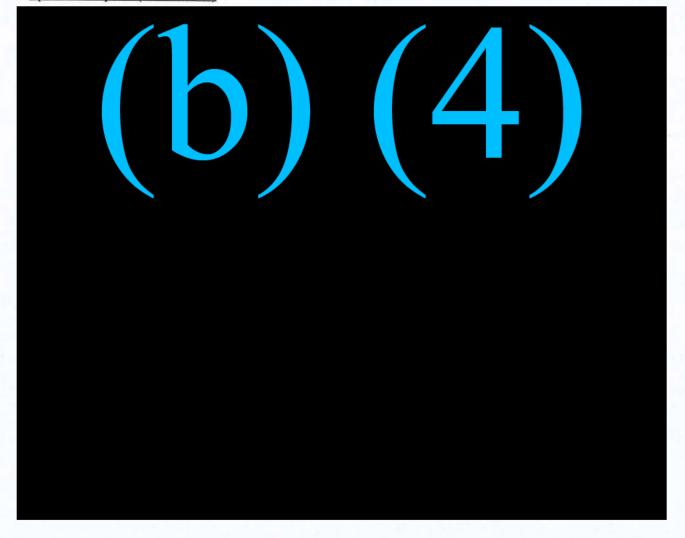
Biotech Field Compliance Team Monsanto Company

 Location
 County
 State

 2147303318
 Roberts
 SD
 Not Planted

 2147303319
 Spink
 SD

Spink County/SD (2147303319)



(b) (4)

CONFIDENTIAL BUSINESS JUSTIFICATION

The information claimed as confidential in the Field Test Report consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943#44 (IOth Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289#291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

^{*} In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 is such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

Field Monitoring Data as CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, an observation concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as [CBI] and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled [CBI-Deleted] and that document labeled as CBI-Deleted.

2000 Wheat Field Test Report USDA #00-039-07n Monsanto #2000-85XRAB

AMENDED December 17, 2002

Biotech Field Compliance Team Monsanto Company

LocationCountyState2147303318RobertsSDNot Planted2147303319SpinkSD

Spink County/SD (2147303319)

Planting Date: 04/12/2000

Harvest Date: 08/02/2000

Vector Constructs/Line Numbers Planted: [CBI-Deleted]

Purpose of Field Trial: [CBI-Deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI-Deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI-Deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI-Deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI-Deleted]

Monitoring for Volunteer Plants: [CBI-Deleted]

Additional Comments: [CBI-Deleted]

Bp number: 00-039-09n

App number: 2000-88XRAB Begin movement: 2/07/00 2/06/01 Received: 2/08/00 End movement: Institution: Monsanto Begin release: 2/07/00 2/06/01 Recipient: Wheat End release: Pending Acre: 5.00 Status: CBI status: Effective date: 3/09/00 CBI HT - Glyphosate tolerant Phenotype: Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield, MO 636-737-7085 Fax: Telephone: (b) (6), (b) (7)(C) _____ Initial Date [√] Assign Bp number and initial data entry Review by biotechnologist Letter of notification to State Fed-ex [] State response O/d Loc Site Reg Interstate *Dest*KS *SCR * Interstate *Dest*WA *WR Interstate *Orig*KS *SCR * Interstate *Orig*WA *WR * [] Release *WA 1*WR 5. Enter genes into database Letter of acknowledgement/denial/withdraw Enter final data into database



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-88XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-09n

1. USDA Reference Number

2. Applicant Reference Number 2000-88XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail b) (6), (b) (7)(C)

636/737-7085

(b) (6), (b) (7)(C) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

cultivar/Variety Bobwhite

CBI

Monsanto Reference ID

2000-88XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- (b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI

Monsanto Reference ID

2000-88XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/15 -- [(b) (4)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- (b) (4) (CB)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- (b) (4) (CBI)

Monsanto	Reference ID
2000-88X	RAB

7	Mode	of	Transformation
•		~.	i i di i di di i i i di di di

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1200 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

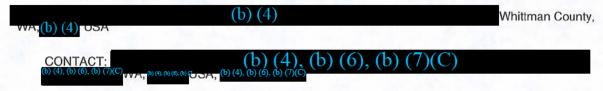
KS, WA

KS, WA

Ship From:

KS

WA

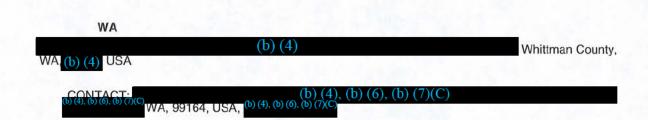


Ship To:

(b) (4) Sedgwick County, KS(b) (4) USA

Monsanto Reference ID 2000-88XRAB





Monsanto Reference ID	
2000-88XRAB	

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(b) (4)

WA, USA, 5 acres.

Whittman County,

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C) (b) (4), (b) (6), (b) (7)(C) (b) (4), (b) (6), (b) (7)(C)



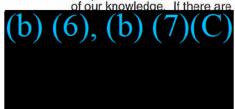
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-88XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (lOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-88XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Monsanto ID: 2000-88XRAB

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.





MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-88XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-09n

1. USDA Reference Number

2. Applicant Reference Number 2000-88XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail (b) (6), (b) (7)(C)

636/737-7085

b) (6), (b) (7)(C)_{@ monsanto.com}

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

cultivar/Variety Bobwhite

Monsanto Reference ID

2000-88XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Page 2 of 7

Monsanto Reference ID

2000-88XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium

tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto F	ference ID
------------	------------

2000-88XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1200 pounds of wheat seed to and from each location.

ORIGIN:

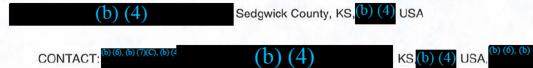
DESTINATION:

KS, WA

KS, WA

Ship From:

KS

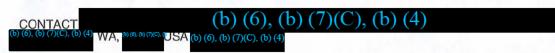


WA

vvA, (b) (4) USA

(b)(4)

Whittman County,



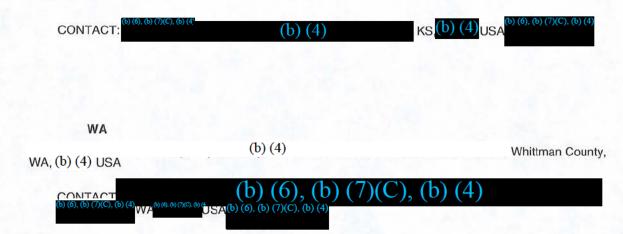
Ship To:

KS

Sedgwick County, KS,(b) (4) USA

Monsanto Reference ID

2000-88XRAB



Monsanto Reference ID 2000-88XRAB Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(k)(1)

Whittman County,

WA, USA, 5 acres.

(b) (6), (b) (7)(C), (b) (4)

 $(b) \underset{\text{WA,}}{(6)} (b) \underset{\text{JSA,}}{(b)} (7) (C), (b) \underset{\text{JSA,}}{(b)} (4)$





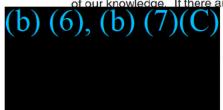
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-88XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000

MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-88XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-09n

1. USDA Reference Number

2. Applicant Reference Number 2000-88XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail (b) (6), (b) (7)(C

636/737-7085

(b) (6), (b) (7)(C)₃ monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

cultivar/Variety Bobwhite

Monsanto Reference ID

2000-88XRAB

designation of transformed line: 33391

.

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-88XRAB

designation of transformed line:

33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted]

CBI

Gene: CTP7-CP4 -- [CBI Deleted]

CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted]

CBI

Monsanto Reference I	D
----------------------	---

2000-88XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

WA, USA, 5 acres.

(b)(4)

Whittman County,

RESPONSIBLE PERSON/RESEARCHER:

(b) (b), (b) (7)(c) A^{(b) (b), (b) (7)(c)}SA,(b) (6), (b) (7)(

Page 6 of 7

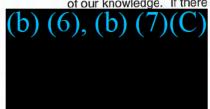


MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-88XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000

Monsanto Reference	ID
2000-88XRAB	

7. Mode of Transformation	Disarmed Agrobacterium tumefaciens		
8. Introduction	Interstate Movement and Release		
Ship up to 1200 pounds of wi	heat seed to and from each location.		
ORIGIN:	DESTINATION:		
KS, WA	KS, WA		
Ship From:			
KS			
(b) (4)	Sedgwick County, KS, (b) (4) Us	SA	
CONTACT: (b) (6), (b) (7)(0	(b) (4) KS	S,(b) (4) USA(b) (6), (b) (7)(

Ship To:

WA

wa,(b) (4)USA

(b) (4) Sedgwick County, KS(b) (4) USA

CONTACT:
(b) (6), (b) (7)(C) WA (6) (6) (6), (b) (7)(C)

(b)(4)

Whittman County,

Monsanto Reference ID 2000-88XRAB

CONTACT: (b) (6), (b) (7)(0	(b) (4)	$KS, (b) (4)_{USA}(b) (6), (b) (7)(C)$
WA		
WA, (b) (4) USA	(b) (4)	Whittman County,
CONTACT: (b) (6), (b) (7)(C)WA, (b) (b) (7)(C) US/	(b) (6), (b) (7)(C)	o) (7)(C)

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-09n

Applicant #: 2000-88XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Release destination:

Recipient:

Wheat

Interstate destination: KS WA

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

	STATE RESPONSE TO NOTIFICATION
State	concurs with APHIS determination.
State I	DOES NOT CONCUR and offers the following reasons:
Name of State	official:
Signature:	
Date:	
State:	Rptloc01/R4

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

February 8, 2000

Dear Mr. Wessels:

Enclosed is notification 00-039-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-09n

Applicant #: 2000-88XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS WA

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPO	ONSE TO NOTIFICATION		
State concurs with APHIS det	ermination.	120	
State DOES NOT CONCUR and of	fers the following reasons:		
Name of State official:			
Signature:			
Date:			
State:	Rptloc01/R4		

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-09n

Applicant #: 2000-88XRAB

Received:

February 8, 2000

Effective:

March 9, 2000

Institution: Monsanto

Recipient: Wheat

Interstate destination: KS WA

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RES	SPONSE TO NOTIFICATION
State concurs with APHIS de	etermination.
State DOES NOT CONCUR and	offers the following reasons:
Name of State official: Thomas	Sim II
Signature: (b) (6), (b) (7)(C)	
Date: 2/24/00	* ** **
State: Lausas	Rptloc01/R4





Animal and Plant Health Inspection Service

4700-River Road Riverdale, MD 20737

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

3609022094

February 8, 2000

Dear Mr. Wessels:

Enclosed is notification 00-039-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number Received: 00-039-09n

February 8, 2000

Effective:

Applicant #: 2000-88XRAB

Institution: Monsanto

March 9, 2000

Recipient:

Wheat

Interstate destination: KS WA Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Harmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION .

State concurs with APHIS determination.

State DOES NOT CONCUR and offers the following reasons:

Signature

Date:

State:

Rptloc01/R4

(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-09n (2000-88XRAB) Regulated article - Wheat Destinations - Kansas, Washington

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- T. Sim, Kansas State Board of Agric., Topeka, KS
- T. Wessels, Washington Dept. of Agric., Olympia, WA
- D. DeWeese, PPQ, SCR, Jefferson City, MO
- R. Stoaks, PPQ, WR, Sacramento, CA

File number 00-039-09n

2000 Wheat Field Trial Report Monsanto # 2000-88XRAB USDA # 00-039-09n

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1

County Whittman

State WA

Whittman County, WA - Site 1

2000 Wheat Field Trial Report USDA # 00-039-09n Monsanto # 2000-88XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1

County Whittman State WA

Whittman County, WA-Site 1 Planting Date: April 5, 2000 Harvest Date: August 14, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10 line 33391

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the harvested material: [CBI deleted]

General Results of Trial: [CBI deleted]

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

Monsanto ID: 2000-88XRAB

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

2000 Wheat Field Trial Report USDA # 00-039-09n Monsanto # 2000-88XRAB

(b) (6), (b) (7)(C) June 6, 2001 Monsanto Company

Location Washington State University

County Whittman

State WA

Whittman County, WA

Confirmation Report-Memory Send

Time : Mar-09-00 02:47pm

Tel line 1: Tel line 2: Name

Job number : 815

Date : Mar-09 02:44pm

To : 916367377085

: 01 Document Pages

Start time : Mar-09 02:45pm

End time : Mar-09 02:46pm

: 01 Pages sent

*** SEND SUCCESSFUL *** Job number : 815



4700 River Road Rivergale, MO 20737

March 9, 2000

Chesterfield Pkwy N 700 St. Louis,

(b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-09n (2000-88XRAB) Regulated article - Wheat Destinations - Kansas, Washington

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

CC: T. Sim, Kansas State Board of Agric., Topeka, KS T. Wessels, Washington Dept. of Agric., Olympia, WA D. DeWeese, PPQ, SCR, Jefferson City, MO R. Stoaks, PPQ, WR, Sacramento, CA

An Equal Oquanumay Empl

Bp number: 00-039-10n

App number: 2000-89XRAB Begin movement: 2/07/00 Received: 2/08/00 End movement: 2/06/01 Institution: Monsanto Begin release: 2/07/00 Recipient: Wheat End release: 2/06/01 Status: Pending Acre: Effective date: 3/09/00 CBI status: CBI HT - Glyphosate tolerant Phenotype: Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield Telephone: (b) (6), (b) (7)(C) Telephone: Fax: 636-737-7085 Initial [V] Assign Bp number and initial data entry [X] Review by biotechnologist Letter of notification to State Col-ex 3. [] State response O/d Loc Site Reg Interstate *Dest*KS *SCR *] Interstate *Dest*WA *WR * Interstate *Orig*KS *SCR * Interstate *Orig*WA *WR Release *WA 1*WR [1] Enter genes into database Letter of acknowledgement/denial/withdraw Enter final data into database



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID

2000-89XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-10n

1. USDA Reference Number

2. Applicant Reference Number 2000-89XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Compliance Specialist

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

February 07, 2000

Phone

FAX

EMail

(b) (6), (b) (7)(C)

636/737-7085

(b) (6), (b) (7)(C)@monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-89XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- (b) (4) CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-89XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/15 -- [(b) (4) CBI

Gene: CTP7-CP4-- (b) (4)
(b) (4)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- (b) (4) (CB) (b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 - (b) (4) (CBI

2000-89XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1220 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

KS, WA

KS, WA

Ship From:

KS

Sedgwick County, KS,(b) (4)USA

CONTACT: b) (4), (b) (6), (b) (7)(0

USA,

WA

Walla Walla County, WA,(b)

CONTACT: (b) (4), (b) (6), (b) (7)(C)

Ship To:

KS

Sedgwick County, KS (b) (4) USA

Monsanto Reference ID

2000-89XRAB



WA Walla Walla County, WA, (b) (4)(b) (4) WA,

CONTACT: (b) (4), (b) (6), (b) (7)(C)

Monsanto Reference ID

2000-89XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(b) (4)

Walla Walla County, WA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C)WA,(b) (4), (b) (6), (b) (7)(C)

Page 6 of 7



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-89XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (7)(C), (b) (6)

Monsanto Company February 07, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (IOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-89XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Monsanto ID: 2000-89XRAB

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.





MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-89XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-10n

1. USDA Reference Number

2. Applicant Reference Number 2000-89XRAB

3. Applicant/Responsible Party

(b) (7)(C), (b) (6)

Compliance Specialist

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail 636/737-7085

(h) (7)/

(b) (7)(C), (b) (6) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-89XRAB

designation of transformed line: 3

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-89XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-89XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1220 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

KS, WA

KS, WA

Ship From:

KS

(b)(4)

Sedgwick County, KS,(b) (4) USA



USA,

WA

(b)(4)

Walla Walla County, WA, (b) (4)

(b) (7)(C), (b) (6), (b) (4)

(b) (7)(C), (b) (6), (b) (4)

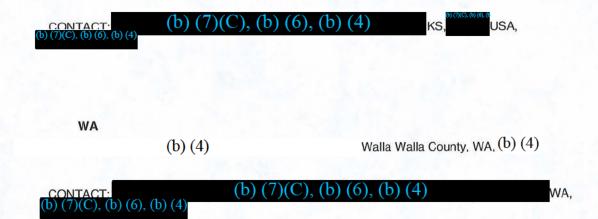
Ship To:

KS

(b)(4)

Sedgwick County, KS,(b) (4) USA

Monsanto Reference ID 2000-89XRAB



Monsanto Reference ID

2000-89XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(b)(4)

Walla Walla County, WA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (7)(C), (b) (6), (b) (4) Walla Walla, WA, (b) (7)(C), (b) (6), (b) (4)





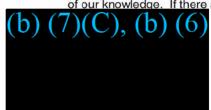
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-89XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000

MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-89XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-10n

1. USDA Reference Number

2. Applicant Reference Number 2000-89XRAB

3. Applicant/Responsible Party

b) (7)(C), (b) (6)

Monsanto Company

Phone

(b) (7)(C), (b) (6

FAX **EMail**

636/737-7085 (b) (7)(C), (b) (6) monsanto.com

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

- February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-89XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-89XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted]

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted]

Monsanto Reference ID

2000-89XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1220 pounds of wheat seed to and from each location.

ORIGIN:

KS, WA

DESTINATION:

KS, WA

Ship From:

KS

(b)(4)

Sedgwick County, KS, (b) (4) USA



WA

(b)(4)

Walla Walla County, WA (b) (4)



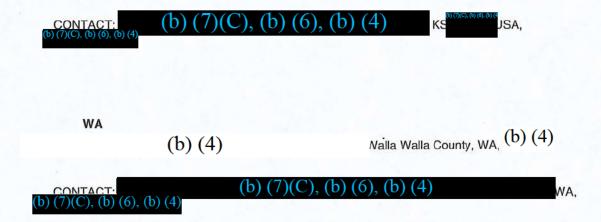
Ship To:

KS

(b) (4)

Sedgwick County, KS_(b) (4)USA

Monsanto Reference ID 2000-89XRAB



Monsanto Reference ID

2000-89XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(b)(4)

Walla Walla County, WA, 5 acres.

(b) (7)(C), (b) (6), (b) (4) WA (b) (7)(C), (b) (6), (b) (4) (7)(C), (b) (6), (b) (4)

Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-89XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (7)(C), (b) (6)

Monsanto Company February 07, 2000 Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-10n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-10n

Applicant #: 2000-89XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS WA Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESI	PONSE TO NOTIFICATION	
State concurs with APHIS det	termination.	
State DOES NOT CONCUR and or	ffers the following reasons:	
Name of State official:		
Signature:		
Date:		
State:	Rptloc01/R4	

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

February 8, 2000

Dear Mr. Wessels:

Enclosed is notification 00-039-10n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-10n

Applicant #: 2000-89XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS WA

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STAT	E RESPONSE TO NOTIFICATION
State concurs with APH	IIS determination.
State DOES NOT CONCUR	and offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rotloc01/R4

Animal and Plant Health Inspection Service

4700-River Road Riverdale, MD 20737

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-10n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-10n

Applicant #: 2000-89XRAB

Received:

February 8, 2000

Effective:

March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS WA Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STA	ATE RESPONSE TO NOTIFICATION
State concurs with AP	PHIS determination. State count evo
State DOES NOT CONCUR	and offers the following reasons:
Name of State official:	comos Som T
Signature: (b) (7)(C), (b)	(6)
Date: 2/24/00	
State: Vansas	Rptloc01/R4



An Equal Opportunity Employer



Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD 20737

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

February 8, 2000

Dear Mr. Wessels:

Enclosed is notification 00-039-10n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number Received: 00-039-10n

February 8, 2000

Applicant #: 2000-89XRAB

Effective: March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS WA

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement. within 30 days of receipt.

Sincerely,

E. Diánne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

BIAIB	RESPONSE	TO	NOTIFICATION	

State concurs with APHIS determination.

State DOES NOT CONCUR and offers the following reasons:

Name of State official: 100000

Date:__

State:

Rptloc01/R4



Signature:____

(b) (7)(C), (b) (6)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (7)(C), (b) (6)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-10n (2000-89XRAB) Regulated article - Wheat Destinations - Kansas, Washington

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- T. Sim, Kansas State Board of Agric., Topeka, KS
- T. Wessels, Washington Dept. of Agric., Olympia, WA
- D. DeWeese, PPQ, SCR, Jefferson City, MO
- R. Stoaks, PPQ, WR, Sacramento, CA

File number 00-039-10n

Confirmation Report-Memory Send

Time : Mar-09-00 02:47pm

Tel line 1: Tel line 2: Name

: 814 Job number

Date : Mar-09 02:43pm

To : 916367377085

Document Pages : 01

Start time : Mar-09 02:43pm

End time : Mar-09 02:47pm

Pages sent : 01

*** SEND SUCCESSFUL *** Job number : 814

Animai and Plant Heatin Inspection Service

4700 River Road Rivergale, MD 20737

March 9, 2000

(b) (7)(C), (b) (6)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b)(7)(C), (b)(6)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-10n (2000-89XRAB) Regulated article - wheat Dostinations - Kansas, Washington

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

(b) (6)

Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

T. Sim, Kaneas State Board of Agric., Topeka, KS T. Wessels, Washington Dept. of Agric., Olympia, WA D. DeWesse, PPQ, SCR, Jefferson City, MO R. Stoaks, PPQ, WR, Sacramento, CA

APT-08 - Protecting Am

An Equal Opportunity Employee

USDA #00-039-10n

2000 Wheat Field Test Report 9-10n Monsanto #2000-89XRAB

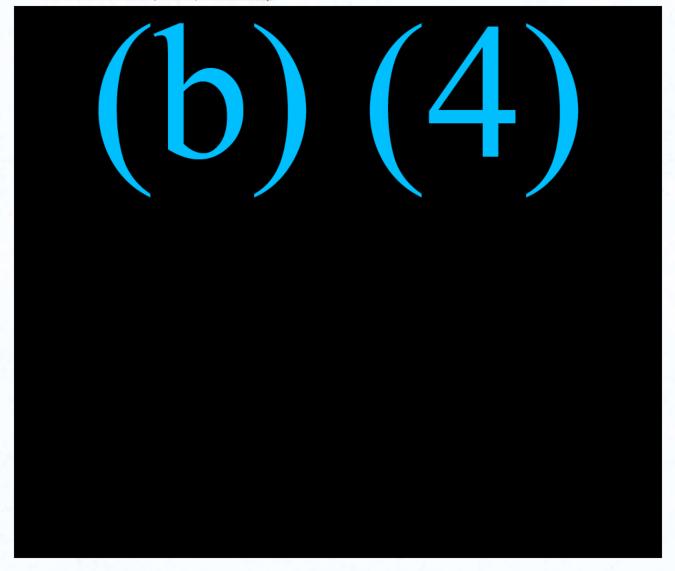
AMENDED
December 17, 2002

Biotech Field Compliance Team Monsanto Company

Location 2066639202

County Walla Walla State WA

Walla Walla County/WA (2066639202)



(b) (4)

CONFIDENTIAL BUSINESS JUSTIFICATION

The information claimed as confidential in the Field Test Report consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943#44 (IOth Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289#291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below*.

^{*} In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 is such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

Field Monitoring Data as CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, an observation concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as [CBI] and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled [CBI-Deleted] and that document labeled as CBI-Deleted.

2000 Wheat Field Test Report USDA #00-039-10n

Monsanto #2000-89XRAB

AMENDED December 17, 2002

Biotech Field Compliance Team Monsanto Company

Location

County

State

2066639202

Walla Walla

WA

Walla Walla County/WA (2066639202)

Planting Date:

04/04/2000

Harvest Date:

08/09/2000

Vector Constructs/Line Numbers Planted: [CBI-Deleted]

Purpose of Field Trial: [CBI-Deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI-Deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI-Deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI-Deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI-Deleted]

Field Monitoring Observations for Plant Stand: [CBI-Deleted]

Disposition of the Harvested Material: [CBI-Deleted]

Monitoring for Volunteer Plants: [CBI-Deleted]

[\/]

6.

Enter genes into database

M Enter final data into database

Letter of acknowledgement/denial/withdraw

Bp number: 00-039-11n

2000-90XRAB App number: Begin movement: 2/07/00 Received: 2/08/00 End movement: 2/06/01 Institution: Monsanto Begin release: 2/07/00 Recipient: Wheat End release: 2/06/01 Status: Pending Acre: 5.00 CBI status: Effective date: 3/09/00 CBI HT - Glyphosate tolerant Phenotype: Comments: Resp person: Parsed name: Monsanto Company Address1: Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield, MO Telephone: (b) (6), (b) (7)(0 636-737-7085 ======== ______ Initial [M Assign Bp number and initial data entry 1. Review by biotechnologist 2. M Letter of notification to State (Fed-ex) 3. [] State response O/d Loc Site Reg Interstate *Dest*KS * *SCR * Interstate *Dest*SD * *SCR * Interstate *Orig*KS *SCR * Interstate *Orig*SD *SCR * Release *SD 1] 1*SCR *



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PHONE (314) 694-1000
http://www.monsanto.com

February 07, 2000

Monsanto Reference ID

2000-90XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-039-11n

1. USDA Reference Number

2. Applicant Reference Number 2000-90XRAB

3. Applicant/Responsible Party

ď

(b) (6), (b) (7)(C) 636/737-7085

(b) (6), (b) (7)(C) monsanto.com

(b) (6), (b) (7)(C)

Compliance Specialist

Monsanto Company

--- Ci --- Ci ---

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-90XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-90XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/15 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-90XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1500 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

KS, SD

KS, SD

Ship From:

KS

(b)(4)

Sedgwick County, KS (b) (4) JSA

CONTACT: (b) (6), (b) (7)(C), (b) (4) ks $^{(b)(6),(b)(7)(C),(b)(4)}$

SD

(b)(4)

Codington County, SD, (b) (4) JSA

CONTACT: (b) (6), (b) (7)(C), (b) (4)

USA, (b) (6), (b) (7)(C), (b) (4)

(b)(4)

SD, (b) (4), U.S.A

CONTACT: (b) (6), (b) (7)(C), (b) (4) SD, (b) (7)(C), (b) (4)

Monsanto Reference ID
2000-90XRAB

Ship To:

KS

(b) (4) Sedgwick County, KS, (b) (4) SA

CONTACT

(b) (6), (b) (7)(C), (b) (4) KS

SD

(b) (4) Codington County, SD, (b) (4) USA

CONTACT:

(b) (6), (b) (7)(C), (b) (4)

SD, (b) (4) USA

(b) (6), (b) (7)(C), (b) (4)

SD, (b) (4) USA

SD,

Monsanto Re	ference	ID
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2000-90XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

SD (1)

SD

(b)(4)

Codington County, SD, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER (b) (6), (b) (7)(C), (b) (4) (b) (5), (b) (7)(C), (b) (4)

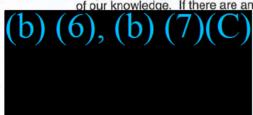


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PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-90XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 07, 2000

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Phone

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Compliance Specialist

FAX

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4. Duration of Introduction

Interstate Movement and Release

February 07, 2000

February 06, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

CBI

Monsanto Reference ID

2000-90XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- (b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-90XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- (b) (4) (CBI

Gene: CTP7-CP4--[
(b) (4)
(b) (4)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [(b) (4) (b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: M1 -- (b) (4) (b) (4)

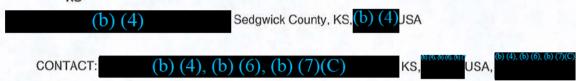
Monsanto Reference ID 2000-90XRAB 7. Mode of Transformation Disarmed Agrobacterium tumefaciens Interstate Movement and Release 8. Introduction Ship up to 1500 pounds of wheat seed to and from each location. ORIGIN: **DESTINATION:** KS, SD KS, SD Ship From: KS Sedgwick County, KS (b) (4) JSA (b) (4), (b) (6), (b) SD (b) (4) Codington County, SD, (b) (4) USA SD, (b) (4), (b) (6), (b) (7)(C)

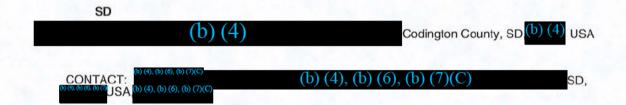
(b) (4), (b) (6), (b) (7)(C

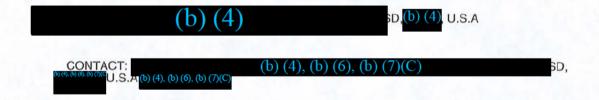
Monsanto Reference ID 2000-90XRAB

Ship To:

KS







Monsanto Reference ID

2000-90XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

SD (1)

SD

(b)(4)

Codington County, SD, USA, 5 acres.



MONSANTO COMPANY

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Monsanto Reference ID 2000-90XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (4), (b) (6), (b) (7)(C)

Monsanto Company February 07, 2000 Monsanto ID: 2000-90XRAB

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (10th Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-90XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY

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February 07, 2000

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Phenotype:

Glyphosate Tolerant

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designation of transformed line:

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Constructs: PV-TXGT10

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CBI

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GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-90XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-90XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1500 pounds of wheat seed to and from each location.

ORIGIN:

KS, SD

DESTINATION:

KS, SD

Ship From:

KS

(b)(4)

Sedgwick County, KS(b)(4)USA

CONTACT: (b) (6), (b) (7)(C), (b) (4) $\times ^{(b)(6),(b)(7)(C),(b)(4)}$

SD

(b)(4)

Codington County, SD, (b) (4) USA

CONTACT (b) (6), (b) (7)(C), (b) (4) SD, USA, (b) (6), (b) (7)(C), (b) (4)

(b)(4)

SD, (b) (4) U.S.A

CONTACT: (b) (6), (b) (7)(C), (b) (4) SD

Monsanto Reference ID 2000-90XRAB Ship To: KS (b) (4) Sedgwick County, KS, (b) (4) USA CONTACT: (b) (6), (b) (7)(C), (b) (4) KS SD (b) (4) Codington County, SD, (b) (4) USA (b) (6), (b) (7)(C), (b) (4) SD, (b) (4) USA

(b) (6), (b) (7)(C), (b) (4)

Monsanto Reference ID

2000-90XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

SD (1)

SD

(b)(4)

Codington County, SD, USA, 5 acres.

 $\begin{array}{c} \text{DESPONICIPE EDEPONI/DESEABLE ED (b) (6), (b) (7)(C), (b) (4)} \\ \text{(b) (6), (b) (7)(C), (b) (4)} \end{array}$



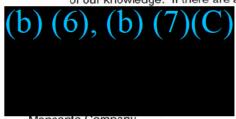
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-90XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 07, 2000 Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-11n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-11n

Applicant #: 2000-90XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS SD Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STAT	TE RESPONSE TO NOTIFICATION
State concurs with APH	IIS determination.
State DOES NOT CONCUR	and offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Mr. Kevin Fridley Division of Agricultural Services South Dakota Department of Agriculture Foss Building-523 East Capitol Pierre, SD 57501-3182

February 8, 2000

Dear Mr. Fridley:

Enclosed is notification 00-039-11n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-11n

Applicant #: 2000-90XRAB

Received:

February 8, 2000

Effective: March 9, 2000

Institution: Monsanto

Recipient: Wheat

Interstate destination: KS SD

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE	RESPONSE TO NOTIFICATION
State concurs with APHIS	determination.
State DOES NOT CONCUR an	nd offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Animal and Plant Health Inspection Service

4700 River Road Riverdale, MD 20737

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 8, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-039-11n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-039-11n

Applicant #: 2000-90XRAB

Received:

February 8, 2000

Effective:

March 9, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS SD Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPON	NSE TO NOTIFICATION	
State concurs with APHIS deter	mination. State cannot evaluate provided information	ei.
State DOES NOT CONCUR and offe	ers the following reasons:	
Name of State official: Thomas	Store 12	
Signature: (b) (6), (b) (7)(C)		
Date: 2/24/00		
State: Kambas	Rptloc01/R4	



Animal and Plant Health Inspection Service 4700-River Road Riverdale, MD 20737

Mr. Kevin Fridley Division of Agricultural Services South Dakota Department of Agriculture Foss Building-523 East Capitol Pierre, SD 57501-3182

2605 773 3481

February 8, 2000

Dear Mr. Fridley:

Enclosed is notification 00-039-11n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number Received:

00-039-11n

February 8, 2000

Institution: Monsanto

Interstate destination: KS SD Release destination:

Applicant #: 2000-90xRAB

Effective: March 9, 2000

Recipient:

Wheat

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

Jianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOTIFICATION

State concurs with APHIS determination.

State DOES NOT CONCUR and offers the following reasons:

State:

. . . . Rptloc01/R4



PHS - Protecting American Agriculture

An Equal Opportunity Employer

(b) (6), (b) (7)(C)

Monsanto company 700 Chesterfield Parkway N St. Louis, MO 63198



Your notification request has been acknowledged and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-11n (2000-90XRAB) Regulated article - Wheat Destinations - Kansas, South Dakota

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc.

T. Sim, Kansas State Board of Agric., Topeka, KS

K. Fridley, South Dakota Dept. of Agric., Pierre, SD

D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-039-11n

Confirmation Report-Memory Send

Time : Mar-08-00 04:14pm

Tel line 1: Tel line 2: Name

Job number : 772

Date : Mar-08 04:13pm

: 916367377085 To

Document Pages : 02

Start time : Mar-08 04:13pm

End time : Mar-08 04:14pm

Pages sent : 02

Job number : 772 *** SEND SUCCESSFUL ***



4700 River Road

March 8, 2000

(b) (6), (b) (7)(C)

Monsanto company 700 Chesterfield Parkway N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 9, 2000.

Interstate movement and Release Notification no. 00-039-11n (2000-90XRAB) Regulated article - Wheat Destinations - Kansas, South Dakota

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Biotechnology Program Operations Scientific Services Protection and Quarantine

Enclosure

T. Sim, Kansas State Board of Agric., Topeka, KS K. Fridley. South Dakota Dept. of Agric., Pierre, SD D. Dewess, FPQ. 3CR, Jefferson City, MO

APRES - Prosecuting American Agresia

An Equal Opportunity Employ

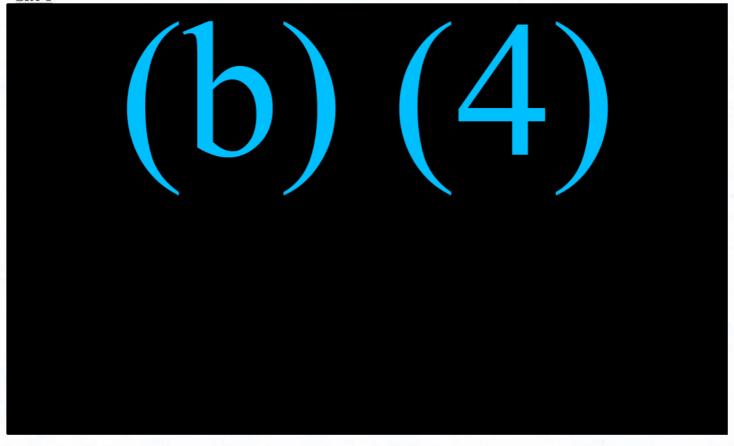
2000 Wheat Field Trial Report Monsanto # 2000-90XRAB USDA # 00-039-11n

Biotech Field Compliance Team October 11, 2001 **Monsanto Company**

Location Site #1

County Codington State SD

Site 1



2000 Wheat Field Trial Report Monsanto # 2000-90XRAB USDA # 00-039-11n

Biotech Field Compliance Team October 11, 2001 **Monsanto Company**

Location Site #1

County Codington

State SD

Site 1

Planting Date: April 25, 2000

Destruct Dates: Mowed June 22, 2000, Disked July 6, 2001 and Tilled July 7, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, lines 33391

Purpose of Trial: [CBI deleted]

Field Monitoring for Disease Susceptibility: [CBI deleted]

Field Monitoring for Insect Susceptibility: [CBI deleted]

Field Monitoring for Plant Growth, Weediness Characteristics: [CBI deleted]

Field Monitoring for Plant Stand: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area: [CBI deleted]

Additional Comments: [CBI deleted]

Bp number: 00-040-05n

App number: 2000-92XRAB Begin movement: 2/08/00 Received: 2/09/00 End movement: 2/07/01 Institution: Monsanto Begin release: 2/08/00 Recipient: Wheat End release: 2/07/01 Status: Pending 5.00 Acre: Effective date: 3/10/00 CBI status: CBI Phenotype: HT - Glyphosate tolerant Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield, MO Fax: 636-737-7085 ______ Initial [N Assign Bp number and initial data entry [and] [2/10/2000]* 17/47 1× Review by biotechnologist 3. Letter of notification to State Fed-ex [] State response 0/d Loc Site Reg Interstate *Dest*KS * *SCR * Interstate *Dest*OR * *WR * Interstate *Orig*KS * *SCR * Interstate *Orig*OR *WR Release *OR 1*WR 1 [] Enter genes into database Letter of acknowledgement/denial/withdraw [K&10] [3/15/00]* [KRNO] [3/16/00] [Enter final data into database



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-92XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-05n

1. USDA Reference Number

2. Applicant Reference Number 2000-92XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail

636/737-7085

(6), (b) (7)(

(b) (6), (b) (7)(C)@ monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

CBI

CBI

Monsanto Reference ID

2000-92XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- (b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI

CBI

CBI

Monsanto Reference ID

2000-92XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/15 -- [(b) (4)

Gene: CTP7-CP4-- (b) (4) (4)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter MP4 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: M1 -- (b) (4) (c) (b) (4)

NA	4- I	2050	MANAA	In
Monsan	101	reie	rence	ı

2000-92XRAB

7. Mode of Transformation Disarmed Agrobacterium tumefaciens

8. Introduction Interstate Movement and Release

Ship up to 1200 pounds of wheat seed to and from each location.

ORIGIN: DESTINATION: KS, OR KS, OR

Ship From:

(b) (4) Sedgwick County, KS, (b) (4) USA

OR
(b) (4)
Umatilla County, OR, (b) (4) Usa

CONTACT: (b) (4), (b) (6), (b) (7)(C) OR,

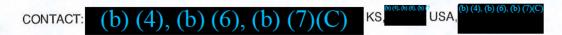
Ship To:

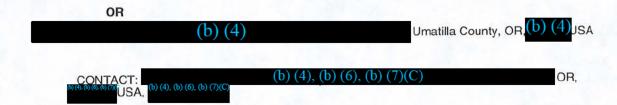
KS

(b) (4) Sedgwick County, KS, (b) (4) USA

Monsanto Reference ID

2000-92XRAB





Martin Britains ID	
Monsanto Reference ID	
2000-92XRAB	
Release Site:	
NUMBER OF STATES/TERRITORIES AND SITES:	
OR (1)	
OR	
(b) (4)	Umatilla County, OR, USA, 5 acres.
RESPONSIBLE PERSON/RESEARCHER:	(b) (4), (b) (6), (b) (7)(C)
(b) (4), (b) (6), (b) (7)(C) OR, (b) (d), (b) (d), (b)) (o), (o) (r)(c)



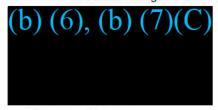
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-92XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (lOth Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (10th Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create

essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be

able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-92XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-05n

- 1. USDA Reference Number
- 2. Applicant Reference Number 2000-92XRAB
- 3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX

EMail

(b) (6), (b) (7)(C)

636/737-7085

(b) (6), (b) (7)(C)_{@monsanto.com}

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-92XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-92XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

CBI Promoter: CMP 3/I5 -- [CBI Deleted]

CBI Gene: CTP7-CP4 -- [CBI Deleted]

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

CBI Promoter: MP4 -- [CBI Deleted]

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

CBI Terminator: M1 -- [CBI Deleted]

Monsanto Reference ID

2000-92XRAB

7. Mode of Transformation Disarmed Agrobacterium tumefaciens

8. Introduction Interstate Movement and Release

Ship up to 1200 pounds of wheat seed to and from each location.

ORIGIN: DESTINATION: KS, OR KS, OR

Ship From:

KS

(b) (4) Sedgwick County, KS (b) (4) USA

OR
(b) (4) Umatilla County, OR(b) (4), USA

CONTACT: (b) (6), (b) (7)(C), (b) (4)

OR. (b) (6), (b) (7)(C), (b) (4)

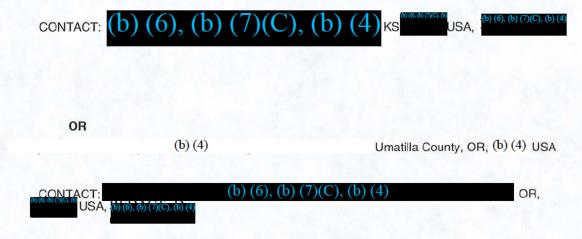
Ship To:

KS

(b) (4) Sedgwick County, KS (b) (4) USA

Monsanto Reference ID

2000-92XRAB



Monsanto Reference ID

2000-92XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

OR (1)

OR

(b)(4)

Umatilla County, OR, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (6), (b) (7)(C), (b) (4) OR (00.0) OR

; (b) (6), (b) USA, (b) (6), (b) (7)(C), (b) (4)





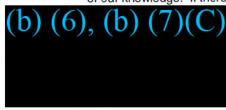
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63i98 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-92XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-92XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-05n

1. USDA Reference Number

2. Applicant Reference Number 2000-92XRAB

3. Applicant/Responsible Party

Phone

(b) (6), (b) (7)(C)

FAX

636/737-7085

EMail

 $(b) (6), (b) (7)(C)_{@monsanto.com}$

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

Phenotype:

Glyphosate Tolerant

HT

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-92XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-92XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-92XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 1200 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

KS, OR

KS, OR

Ship From:

KS

(b)(4)

Sedgwick County, KS(b) (4), USA

CONTACT: (b) (6), (b) (7)(C), (b) (4) ks $^{(b)(6, b)(7)(C), (b)(4)}$

OR

(b)(4)

Umatilla County, OR,(b) (4) USA

CONTACT (b) (6), (b) (7)(C), (b) (4)

OR

Ship To:

KS

(b)(4)

Sedgwick County, KS, (b) (4) USA

Page 4 of 7

Monsanto Reference ID 2000-92XRAB

CONTACT: (b) (6), (b) (7)(C), (b) (4) KS USA (b) (6), (b) (7)(C), (b) (4)

OR
(b) (4)
Umatilla County, OR,(b) (4) USA

CONTACT: (b) (6), (b) (7)(C), (b) (4)

DR,

Monsanto Reference ID

2000-92XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

OR (1)

OR

(b)(4)

, Umatilla County, OR, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (6), (b) (7)(C), (b) (4) PR, $^{(0.6,0.7)C,0.6}$ SA, (b) (6), (b) (7)(C), (b) (4)

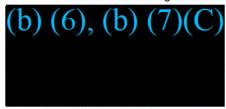
(b) (6), (b) (7)(C), (l)

Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-92XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000 Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 10, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-040-05n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-05n

Applicant #: 2000-92XRAB

Received:

February 9, 2000

Effective:

March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS OR Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE	E RESPONSE TO NOTIFICATION
State concurs with APHI	S determination.
State DOES NOT CONCUR a	and offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Mr. John Griesbach Oregon Department of Agriculture Plant Division 635 Capitol St., N.E. Salem, OR 97310-0110

February 10, 2000

Dear Mr. Griesbach:

Enclosed is notification 00-040-05n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-05n

Applicant #: 2000-92XRAB

Received:

February 9, 2000

Effective: March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS OR

Release destination: OR

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ B. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE 1	RESPONSE TO NOTIFICATION
State concurs with APHIS	determination.
State DOES NOT CONCUR and	d offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Animal and Plant Health Inspection Service

4700 River Road Riverdale, MD 20737

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture

901 S. Kansas Avenue Topeka, KS 66612-1281

Dear Mr. Sim IV:

February 10, 2000

Enclosed is notification 00-040-05n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number Received:

00-040-05n

February 9, 2000

Institution: Monsanto

Interstate destination: KS OR Release destination:

Applicant #: 2000-92XRAB Effective: March 10, 2000

Recipient: Wheat

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOTIF	ICATION
State concurs with APHIS determination.	State cannot eval Information prov
State DOES NOT CONCUR and offers the foll	owing reasons:
Name of State Official: Thomas Sing	
Signature: (b) (6), (b) (7)(C)	
Date: 2/24/00	
State: Kansus Port	1 oc01 /P4



Animal and Plant Health Inspection Service

4700 River Road Riverdate, MD 20737

Mr. John Griesbach Oregon Department of Agriculture Plant Division 635 Capitol St., N.E. Salem, OR 97310-0110

February 10, 2000

Dear Mr. Griesbach:

Enclosed is notification 00-040-05n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-051

February 9, 2000

Effective:

Applicant #: 2000-92XRAB March 10, 2000

Received: Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS OR

Release destination:

OR

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely.

E. Dianne Machiaker, Luit Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

		STATE	RESPONSE	10	MOTIFICATION
g	 med to be	ADUTO	determin	nati	On -

State DOES NOT CONCUR and offers the following reasons:

Name of State official:

J. R. Johnson hleen

Date: 3-10-2000

Rptloc01/R4

MAR 1 3 2000



March 15, 2000

(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear(b)(6), (b)(7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 15, 2000.

Interstate movement and Release Notification no. 00-040-05n (2000-92XRAB) Regulated article - Wheat Destinations - Kansas, Oregon

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

CC:

- T. Sim, Kansas State Board of Agric., Topeka, KS
- J. Griesbach, Oregon Dept. of Agric., Salem, OR
- R. Stoaks, PPQ, WR, Sacramento, CA
- D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-040-05n

Confirmation Report-Memory Send

Time : Mar-15-00 04:57pm

Tel line 1: Tel line 2: Name

Job number : 001

: Mar-15 04:55pm Date

: 916367377085 To

: 01 Document Pages

: Mar-15 04:55pm Start time

End time : Mar-15 04:56pm

Pages sent : 01

*** SEND SUCCESSFUL *** : 001 Job number

United States Department of Agriculture

Animal and Plant Heam Inspection Service

4700 River Road Riverdale, MD 20737

March 15, 2000

(b) (6), (b) (7)(C)

700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been acknowledged and may be executed according to 7 CFR 340.3(c), effective on or after March 15, 2000.

Interstate movement and Release Notification no. 00-040-05n (2000-92%RAB) Regulated article - wheat Destinations - Kansas, Oregon

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

E. Dianne Hatmaker, Chier Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

T. Sim, Kansas State Board of Agric., Topeka, K. J. Griesbach, Oregon Dept. of Agric., Salem, OR R. Stoaks. FPQ, WR, Sacramento, CA D. DeWeese, PPQ, SCR, Jefferson City, MO File Number 00-040-05n

APYRIS - Protecting American Agricum

ал Едив Орранивым Етака

2000 Wheat Field Trial Report USDA # 00-040-05n Monsanto # 2000-92XRAB

(b) (6), (b) (7)(C) June 6, 2001 Monsanto Company

Location Columbia Basin Ag Research Station County Umatilla

State OR

(b)(4)

2000 Wheat Field Trial Report
USDA # 00-040-05n Monsanto # 2000-92XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1 County Umatilla State OR

Umatilla County, OR – Site 1

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (lOth Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug. Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.¹

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

2000 Wheat Field Trial Report USDA # 00-040-05n Monsanto # 2000-92XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1

County Umatilla

State OR

<u>Umatilla County, OR</u> - Site 1 Planting Date: March 31, 2000 Harvest Date: August 7, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of trial:

[CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth, Weediness and Plant Stand Characteristics: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

Interstate *Orig*WA

*WA

[Letter of acknowledgement/denial/withdraw

Enter genes into database

[Enter final data into database

Release

[]

Notification Tracking Sheet

Bp number: 00-040-06n

App number: 2000-93XRAB Begin movement: 2/08/00 Received: 2/09/00 End movement: 2/07/01 Institution: Monsanto Begin release: 2/08/00 Recipient: Wheat End release: 2/07/01 Status: Pending Acre: 5.00 Effective date: 3/10/00 CBI status: CBI Phenotype: HT - Glyphosate tolerant Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip:Chesterfield, MO (b) (6), (b) (7)(C Fax: 636-737-7085 _____ Initial [] Assign Bp number and initial data entry [KSA]* R/11/00]* [X] Review by biotechnologist Letter of notification to State -cd -cx 3. [] State response O/d Loc Site Reg Interstate *Dest*MO * *SCR * Interstate *Dest*WA *WR * Interstate *Orig*MO *SCR *

*WR

1*WR

OR120018_BR_004919

1

]

[2/28/00]



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID 2000-93XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-06n

1. USDA Reference Number

2. Applicant Reference Number 2000-93XRAB

3. Applicant/Responsible Party

Phone

(D) (B), (D) (7)(C

FAX

636/737-7085

EMail

(b) (6),

Monsanto Company

(b) (6), (b) (7)((

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

- February 07, 2001

@monsanto.com

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

CBI

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- (b)(4) (b)(4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/15 - 1 (b)(4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID 2000-93XRAB

33512, 35710, 35845 designation of transformed line: Constructs: PV-TXGT12 **GENE OF INTEREST** CBI (b)(4)Promoter: CMP 3/I5 --(b)(4)CBI Gene: CTP7-CP4 Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA. **GENE OF INTEREST** CBI Promoter: MP4 -Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4. CBI Terminator: M1 --

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S537, TA S317, TA S621, TA S635, TA S1081, TA S2520, TA S5070, TA S5450,

CBI

CBI

Constructs: PV-TXGT13

GENE OF INTEREST

(b)(4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 3' --(b)(4)

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S2747, TA S8691

Constructs: PV-TXGT15

GENE OF INTEREST

Promoter: CMP 3/15 -- (b)(4)

(b)(4)

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 --

(b)(4)

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: M1 3' -- (b)(4)

(b)(4)

CBI

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S7327, TA S9240

Constructs: PV-TXGT17

GENE OF INTEREST

Promoter: CMP3/15-1 -- (b)(4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S7886

Constructs: PV-TXGT22

GENE OF INTEREST

Promoter CMP3/15-3 -- (b)(4) (b)(4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S7535, TA S9215

Constructs: PV-TXGT23

GENE OF INTEREST

Promoter: CMP3/15-2 -- [Fraq (b)(4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

CBI

Monsanto Reference ID

2000-93XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 5000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

MO, WA

MO, WA

Ship From:

MO

(b)(4)

St. Louis County, MO, (b)(4) U.S.

 $\begin{array}{c} \text{CONTACT:} \\ \text{(b) (4), (b) (6), (b) (7)(C)} \end{array}$

MO,

WA

(b)(4)

Whittman County, WA, USA

CONTACT: (b) (4), (b) (6), (b) (7)(C)

WA, USA, (b) (4), (b) (6), (b) (7)(0

(b)(4)

Benton County, $WA_{a}(b)(4)$ JSA

CONTACT: (b) (4), (b) (6), (b) (7)(C)

0(4). (0(0). (0). (U

o) (4), (b) (6), (b) (7)(C

Monsanto Reference ID 2000-93XRAB Ship To: MO St. Louis County, MO (b)(4) U.S.A (b)(4)MO, CONTACT: (b) (4), (b) (6), (b) (7)(C) WA Whittman County, WA, USA (b)(4)(b) (4), (b) (6), (b) (7)(C) CONTACT: WA, USA Benton County, WA(b)(4) USA (b)(4)CONTACT: (b) (4), (b) (6), (b) (7)(C) WA.

Monsanto Reference ID

2000-93XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(b)(4)

Whittman County, WA, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b)(4),(b)(6),(b)(7)(C) wa, USA, (b)(4),(b)(6),(b)(7)(C)



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-93XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 08, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (lOth Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (lOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-93XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create

Monsanto ID: 2000-93XRAB

essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be

Monsanto ID: 2000-93XRAB

able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY

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February 08, 2000

Monsanto Reference ID

2000-93XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-06n

1. USDA Reference Number

2. Applicant Reference Number 2000-93XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

Phone

(b) (6), (b) (7)(C)

FAX EMail 636/737-7085

700 Cheserfield Parkway North

700 Chesemeid Parkway North

St. Louis

MO

63198

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b) (6), (b) (7)(C)@monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-93XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID

2000-93XRAB

designation of transformed line: 33512, 35710, 35845

Constructs: PV-TXGT12

GENE OF INTEREST

CBI Promoter: CMP 3/I5 -- [CBI Deleted]

CBI Gene: CTP7-CP4 -- [CBI Deleted]

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium

tumefaciens T-DNA.

GENE OF INTEREST

CBI Promoter: MP4 -- [CBI Deleted]

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

CBI Terminator: M1 -- [CBI Deleted]

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S537, TA S317, TA S621, TA S635, TA S1081, TA S2520, TA S5070, TA S5450,

Constructs: PV-TXGT13

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 3' -- [CBI Deleted]

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S2747, TA S8691

Constructs: PV-TXGT15

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 3' -- [CBI Deleted] CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S7327, TA S9240

Constructs: PV-TXGT17

GENE OF INTEREST

Promoter: CMP3/15-1 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S7886

Constructs: PV-TXGT22

GENE OF INTEREST

Promoter: CMP3/15-3 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S7535, TA S9215

Constructs: PV-TXGT23

GENE OF INTEREST

Promoter: CMP3/15-2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID

2000-93XRAB

7. Mode of Transformation Disar

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 5000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

MO, WA

MO, WA

Ship From:

MO

(b) (4)

St. Louis County, MO, (b) (4), U.S.A

 $\underset{\text{(b)}}{\text{CONTACT}} \underset{\text{(b)}}{\text{(c)}} \underset{\text{(b)}}{\text{(c)}} \underset{\text{(b)}}{\text{(c)}} \underset{\text{(b)}}{\text{(c)}} \underset{\text{(b)}}{\text{(d)}} \underset{\text{(d)}}{\text{(d)}} \underset{\text{($

WA

(b)(4)

Whittman County, WA, USA

CONTACT: (b) (6), (b) (7)(C), (b) (4) WA, USA (b) (6), (b) (7)(C), (b) (4)

(b) (4) Benton County, WA, (b) (4) USA

CONTACT: (b) (6), (b) (7)(C), (b) (4)

CONTACT: (b) (6), (b) (7)(C), (b) (4)

Monsanto Reference ID

2000-93XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(b) (4)

Whittman County, WA, USA, 5 acres.

 $\frac{\text{desponsible}}{\text{(b) (6), (b) (7)(C), (b) (4)}} \text{person/researcher}(b) (6), (b) (7)(C), (b) (4) \text{wa, usa,}$



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-93XRAB

9. Certification

certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 08, 2000



MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-93XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-06n

1. USDA Reference Number

2. Applicant Reference Number 2000-93XRAB

3. Applicant/Responsible Party

b) (6), (b) (7)(C

Phone FAX

EMail

636/737-7085

Monsanto Company

(b) (6), (b) (7)(C

700 Cheserfield Parkway North

St. Louis

63198

MO

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

- February 07, 2001

(6), (b) (7)(C) monsanto.com

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 --

(b) (4)

(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 --

(b) (4)

CBI

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Monsanto Reference ID 2000-93XRAB

designation of transformed line: 33512, 35710, 35845 Constructs: PV-TXGT12 **GENE OF INTEREST** CBI Promoter: CMP 3/15 --CBI Gene: CTP7-CP4 --Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA. **GENE OF INTEREST** CBI (b) (4) Promoter: MP4 -- [Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CBI Terminator: M1 -- [

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S537, TA S317, TA S621, TA S635, TA S1081, TA S2520, TA

S5070, TA S5450,

Constructs: PV-TXGT13

GENE OF INTEREST

Promoter: MP4 -- (b) (4)
(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: M1.3'-- (b) (4)

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S2747, TA S8691

Constructs: PV-TXGT15

GENE OF INTEREST

Promoter: CMP 3/15 --(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

(b) (4) Promoter: MP4 --

(b)(4)

CBI

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: M1 3' -

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S7327, TA S9240

Constructs: PV-TXGT17

GENE OF INTEREST

Promoter: CMP3/15-1 --

(b) (4)

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Page 6 of 12

(b) (4)

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S7886

Constructs: PV-TXGT22

GENE OF INTEREST

Promoter: CMP3/15-3 -

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Page 7 of 12

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S7535, TA S9215

Constructs: PV-TXGT23

GENE OF INTEREST

Promoter: CMP3/15-2 --

(b) (4

(b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Page 8 of 12

	Monsanto	Reference	ID
--	----------	-----------	----

2000-93XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 5000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

MO, WA

MO, WA

Ship From:

MO

St. Louis County, MO, (b) (4) U.S.A (b) (4)

(b) (4), (b) (6), (b) (7)(C)

MO,

WA

(b) (4)

Whittman County, WA, USA

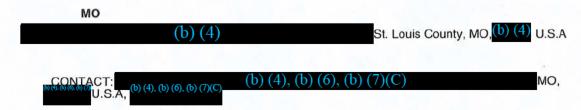
(b) (4), (b) (6), (b) (7)(C)

Benton County, WA(b) (4) USA

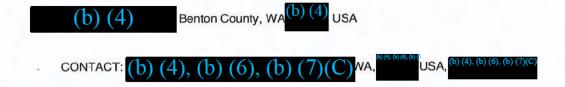
Page 9 of 12

Monsanto Reference ID 2000-93XRAB

Ship To:







Monsanto Reference ID

2000-93XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(b)(4)

Whittman County, WA, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C) WA, USA, (b) (4), (b) (6), (b) (7)(C)



Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-93XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 08, 2000

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-93XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-06n

1. USDA Reference Number

2. Applicant Reference Number 2000-93XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX

EMail

(b) (6), (b) (7) (C)

636/737-7085

(b) (6), (b) (7)(C) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Page 1 of 12

Monsanto Reference ID

2000-93XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

33512, 35710, 35845

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted]

CBI

Gene: CTP7-CP4 -- [CBI Deleted]

CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted]

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S537, TA S317, TA S621, TA S635, TA S1081, TA S2520, TA

S5070, TA S5450,

Constructs: PV-TXGT13

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: M1 3' -- [CBI Deleted]

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S2747, TA S8691

Constructs: PV-TXGT15

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: M1 3' -- [CBI Deleted]

CBI

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S7327, TA S9240

Constructs: PV-TXGT17

GENE OF INTEREST

Promoter: CMP3/15-1 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID

2000-93XRAB

designation of transformed line: TA S7886

Constructs: PV-TXGT22

GENE OF INTEREST

Promoter: CMP3/15-3 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID

2000-93XRAB

designation of transformed line:

TA S7535, TA S9215

Constructs: PV-TXGT23

GENE OF INTEREST

Promoter: CMP3/15-2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Monsanto Reference ID

2000-93XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 5000 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

MO, WA

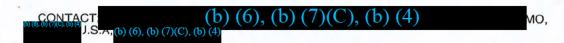
MO, WA

Ship From:

MO

(b)(4)

St. Louis County, MO (b) (4) U.S.A



WA

(b)(4)

Whittman County, WA, USA

CONTACT: (b) (6), (b) (7)(C), (b) (4) $_{\text{WA, USA}}$ (b) (6), (b) (7)(C), (b) (4)

(b) (4) Benton County, WA (b) (4) USA

 $\mathsf{CONTAC}(b) \ (6), \ (b) \ (7)(C), \ (b) \ (4) \\ \mathsf{WA}, \ \ \mathsf{WA}, \ \ \mathsf{USA}$

Monsanto Reference ID 2000-93XRAB

Ship To:

MO

(b)(4)

St. Louis County, MO,(b) (4) U.S.A

CONTACT: (b) (6), (b) (7)(C), (b) (4)

MO.

MO.

WA

(b)(4)

Whittman County, WA, USA

CONTACT: (b) (6), (b) (7)(C), (b) (4) USA

(b) (4) Benton County, WA, (b) (4) JSA

CONTACT: (b) (6), (b) (7)(C), (b) (4) WA. USA (b) (6), (b) (7)(C), (b) (4)

Monsanto Reference ID

2000-93XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

WA (1)

WA

(b)(4)

Whittman County, WA, USA, 5 acres.

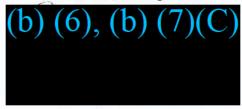
(b) (6) (b) (7) (C) (b) (4) PERSON/RESEARCHER (b) (6) (6) (6) (7) (C) (6) (4) WA, USA,

Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-93XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (lOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create

essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be

able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.

February 10, 2000

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

Dear Mr. Brown:

Enclosed is notification 00-040-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-06n

Applicant #: 2000-93XRAB

Received:

February 9, 2000

Effective:

March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO WA

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE F	RESPONSE TO NOTIFICATION
State concurs with APHIS	determination.
State DOES NOT CONCUR and	d offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

February 10, 2000

Dear Mr. Wessels:

Enclosed is notification 00-040-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-06n

Applicant #: 2000-93XRAB

Received:

February 9, 2000

Effective: March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO WA Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

	STATE RESPONSE TO NOTIFICATION
State concurs	s with APHIS determination.
State DOES NO	OT CONCUR and offers the following reasons:
Name of State office	ial:
Signature:	
Date:	
State:	Rptloc01/R4



Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD 20737

Mr. Michael Brown Plant Industries Division Missouri Department of Agriculture 1616 Missouri Boulevard Jefferson City, MO 65102

February 10, 2000

Dear Mr. Brown:

Enclosed is notification 00-040-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-06n

Applicant #: 2000-93XRAB

Received:

February 9, 2000

Effective:

March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO WA

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

ST	ATE RESPONSE TO NOTIFICATION
State concurs with A	PHIS determination.
	R and offers the following reasons:
Name of State officials	Michael E- Brown
Signature:_ (b) (6)	(b) (7)(C)
Date: 2 (17 00	
State: MO	Rptloc01/R4



FEB 18 2000



Animal and Plant Health Inspection Service

3609022094

4700 River Road Riverdale, MD 20737

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

February 10, 2000

Dear Mr. Wessels:

Enclosed is notification 00-040-06n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040+06n

Applicant #: 2000-93XRAB

Received:

February 9, 2000

Effective:

March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: MO WA

Release destination

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely.					
(b)	(6),	(b)	(7)	(C)	
T Diamer	latmaker V	Chief	10.0	1	_

Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION

State concurs with APHIS determination.

and offers the following/reasons: State DOES NOT CONCUR

Signature:

State:

Rptloc01/R4

49 - Protecting American Agriculture

An Equal Opportunity Employer

February 28, 2000

(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 10, 2000.

Interstate movement and Release Notification no. 00-040-06n (2000-93XRAB) Regulated article - Wheat Destinations - Missouri, Washington

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

- M. Brown, Missouri Dept. of Agric., Jefferson City, MO
- T. Wessels, Washington Dept. of Agric., Olympia, WA
- D. DeWeese, PPQ, SCR, Jefferson City, MO
- R. Stoaks, PPQ, WR, Sacramento, CA

File number 00-040-06n



MONSANTO COMPANY

700 CHESTERFIELD PKWY NORTH CHESTERFIELD, MISSOURI 63198 http://www.monsanto.com

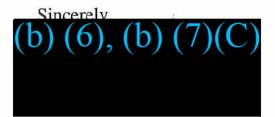
April 7, 2000

Ms. Dianne Hatmaker Animal and Plant Health Inspection Services Biotechnology and Scientific Services 4700 River Road, Unit 147 Riverdale, MD

Dear Ms Hatmaker;

In reviewing Monsanto's acknowledged wheat notification, it was discovered the release site name was incorrect. USDA number 00-040-06n, Monsanto number 2000-93XRAB, the correct name of the site should be (b) (6), (b) (7)(C), (b) (4) Whitman County.

I apologize for any inconvenience this may cause. Please call me at 636/737-6032 if you have any questions.



cc: (b) (6), (b) (7)(C) WA

R. Stokes, Regional Biotechnologist, Sacramento, CA

2000 Wheat Field Trial Report USDA # 00-040-06n Monsanto # 2000-93XRAB

(b) (6), (b) (7)(C)

June 6, 2001 Monsanto Company

Location
Bob Druffel Farm

County Whitman State WA

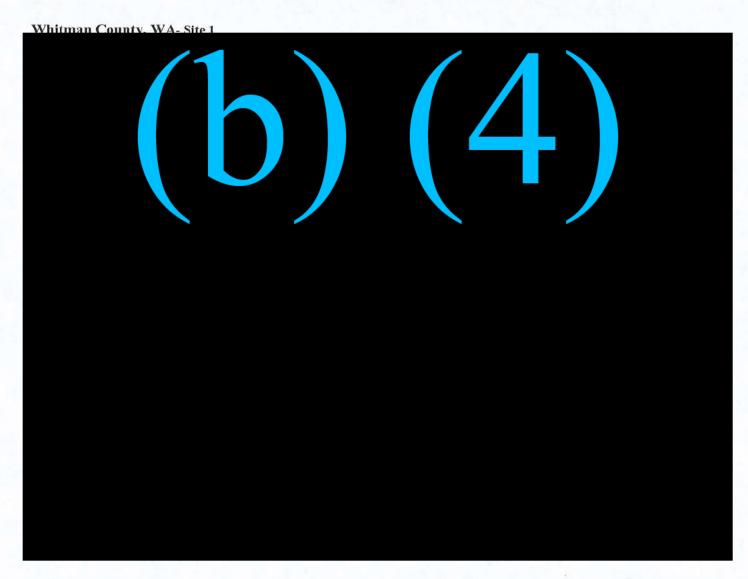
(b) (4)

2000 Wheat Field Trial Report USDA # 00-040-06n Monsanto # 2000-93XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1 County Whitman State WA



CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug.

Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project. v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

Monsanto ID: 2000-93XRAB

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

2000 Wheat Field Trial Report USDA # 00-040-06n Monsanto # 2000-93XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location Site 1 County Whitman

State WA

Whitman County, WA- Site 1 Planting Date: April 11, 2000 Harvest Date: August 25, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391; PV-TXGT12, line 33512.

Purpose of trial:

[CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth Characteristics: [CBI deleted]

Field Monitoring Observations for Weediness Characteristics: [CBI deleted]

Field Monitoring Observations for Plant Stand: [CBI deleted]

Disposition of the Harvested Material: [The harvested grain was buried at the release site.] - CBI

General Results of Field trial: [CBI deleted]

Bp number: 00-040-09n

App number: 2000-97XRAB Begin movement: 2/08/00 Received: 2/09/00 End movement: 2/07/01 Institution: Monsanto Begin release: 2/08/00 Recipient: Wheat End release: 2/07/01 Status: Pending Acre: 20.00 Effective date: 3/10/00 CBI status: Phenotype: HT - Glyphosate tolerant Comments: Resp person: Parsed name: Address1: Monsanto Company Address2: 700 Chesterfield Parkway N. Address3: Address4: City/State/Zip: Chesterfield, MO Telephone: (b) (6), (b) (7)(C Fax: 636-737-7085 ========== ______ Initial [V] Assign Bp number and initial data entry [£MK]* W/11/20000 [Review by biotechnologist Letter of notification to State Fed-CX [] State response 0/d Loc Site Reg Interstate *Dest*KS *SCR * Interstate *Dest*OR *WR Interstate *Dest*WA *WR Interstate *Orig*KS *SCR * Interstate *Orig*OR *WR Interstate *Orig*WA *WR Release *OR 2*WR Release *WA 2*WR I [] / Enter genes into database 6. [/] /Letter of acknowledgement/denial/withdraw [Enter final data into database

asked Priscilla

to correct

the MI

terminator

description.



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-97XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-09n

1. USDA Reference Number

2. Applicant Reference Number 2000-97XRAB

3. Applicant/Responsible Party

Phone

FAX

(b) (6), (b) (7)(C)

b) (6), (b) (7)(C)@monsanto.com

636/737-7085

EMail

Monsanto Company

(b) (6), (b) (

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

CBI

Monsanto Reference ID

2000-97XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST



Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST



Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Monsanto Reference ID 2000-97XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/15 -- (b) (4)

Gene: CTP7-CP4 -- [(b) (4) (CB)

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- (b) (4) (c) (b) (4)

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- (b) (4) (b)

Monsanto Reference ID 2000-97XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 5000 pounds of wheat seed to and from each location.

ORIGIN:

KS, OR, WA

DESTINATION:

KS, OR, WA

Ship From:

KS

(b) (4) Sedgwick County, KS(b) (4) JSA

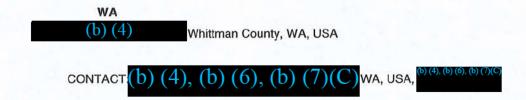
CONTACT: (b)(4),(b)(6),(b)(7)(C) Wichita, KS, WIGH USA

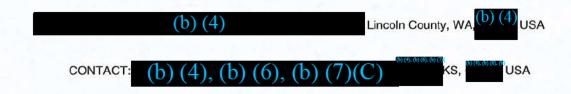
(b) (4), (b) (6), (b) (7)(C) Morrow County, OF USA

CONTACT: (b) (4), (b) (6), (b) (7)(C), Wichita, KS, USA

 $(b)\ (4),\ (b)\ (6),\ (b)\ (7)(C)$ Jmatilla County, OR $^{\tiny{\text{OR}}\ \tiny{\text{OR}}\ \tiny{\text{OR}}}$ USA

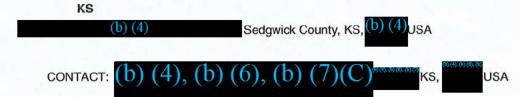
Monsanto Reference ID 2000-97XRAB







Ship To:



Monsanto Reference ID 2000-97XRAB

OR



CONTACT:

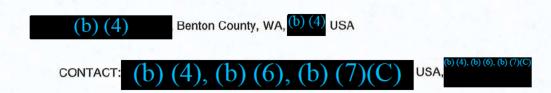
CONTACT: (b) (4), (b) (6), (b) (7)(C)

WA

CONTACT: (b) (4), (b) (6), (b) (7) (C) WA, USA

CONTACT:

Monsanto Reference ID 2000-97XRAB



Monsanto Reference ID 2000-97XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

OR (2), WA (2)

on
(b) (4), (b) (6), (b) (7)(C)

Morrow County, OR, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C) WA USA (b) (4), (b) (6), (b) (7)(C) WA

(b) (4), (b) (6), (b) (7)(C) Umatilla County, OR, USA, 5 acres.

(b) (4) Lincoln County, WA, USA, 5 acres.

(b) (4) Whitman County, WA, USA, 5 acres.

Monsanto Reference ID 2000-97XRAB

RESPONSIBLE PERSON/RESEARCHER: (b) (4), (b) (6), (b) (7)(C) WA USA (b) $^{(b)}$ $^{(b)}$ $^{(b)}$ $^{(b)}$ $^{(b)}$ $^{(c)}$ $^{(c)}$



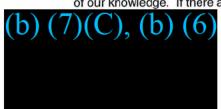
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-97XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (lOth Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create

essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be

Monsanto ID: 2000-97XRAB

able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-97XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-09n

1. USDA Reference Number

2. Applicant Reference Number 2000-97XRAB

3. Applicant/Responsible Party

(b) (7)(C), (b) (6)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX **EMail**

636/737-7085 b) (7)(C), (b) (6) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-97XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-97XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium

tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-97XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 5000 pounds of wheat seed to and from each location.

ORIGIN:

KS, OR, WA

DESTINATION:

KS, OR, WA

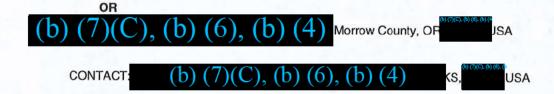
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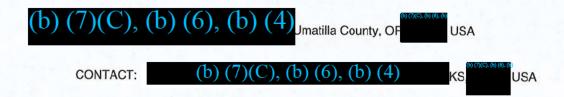
KS

(b) (4)

Sedgwick County, KS, (b) (4) USA

CONTACT: (b)(7)(C),(b)(6),(b)(4) ks, where (b)(7)(C) is a





Monsanto Reference ID 2000-97XRAB

WA

(b)(4)

Whittman County, WA, USA

CONTACT: (b) (7)(C), (b) (6), (b) $(4)_{WA, USA}$

(b) (4)

Lincoln County, WA, (b) (4) USA

CONTACT: (b)(7)(C),(b)(6),(b)(4)

(b) (4) 3enton County, WA, (b) (4) USA

CONTACT: (b)(7)(C), (b)(6), (b)(4) was used (b)(7)(C), (b)(6), (b)(4)

Ship To:

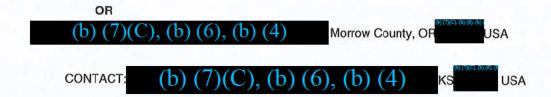
KS

(b)(4)

Sedgwick County, KS,(b) (4) USA

CONTACT: (b) (7)(C), (b) (6), (b) (4) KS (10) USA

Monsanto Reference ID 2000-97XRAB







(b) (4) Lincoln County, WA, (b) (4) USA CONTACT: (b)
$$(7)(C)$$
, (b) (6) , (b) (4) KS. USA

Monsanto Reference ID 2000-97XRAB

 $(b) \, (4) \qquad \qquad \text{Benton County, WA, } (b) \, (4) \, \text{JSA}$

CONTACT: (b)(7)(C), (b)(6), (b)(4) USA (b)(7)(C), (b)(6), (b)(4)

Monsanto Reference ID 2000-97XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

OR (2), WA (2)

OR
(b) (7)(C), (b) (6), (b) (4)

Morrow County, OR, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (7)(C), (b) (6), (b) (4) was, (b) (7)(C), (b) (6), (c) (4)

(b) (7)(C), (b) (6), (b) (4) Umatilla County, OR, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER (b) (7)(C), (b) (6), (b) (4) WA WA

WA

(b)(4)

Lincoln County, WA, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER (b) (7)(C), (b) (6), (b) (4)

(b)(4)

Nhitman County, WA, USA, 5 acres.

Monsanto Reference ID 2000-97XRAB

RESPONSIBLE PERSON/RESEARCHER: (b) (7)(C), (b) (6), (b) (4) WA,





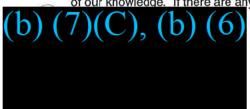
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-97XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000

MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-97XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-09n

63198

1. USDA Reference Number

2. Applicant Reference Number 2000-97XRAB

3. Applicant/Responsible Party

(b) (7)(C), (b) (6)

Phone FAX

(b) (7)(C), (b) (6) 636/737-7085

Monsanto Company

700 Cheserfield Parkway North

St. Louis

EMail

b) (7)(C), (b) (6) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

MO

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-97XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-97XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted]

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID 2000-97XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

Ship up to 5000 pounds of wheat seed to and from each location.

ORIGIN:

KS, OR, WA

DESTINATION:

KS, OR, WA

Ship From:

(b)(4)

Sedgwick County, KS,(b) (4), USA

(7)(C), (b) (6), (b) (4)

(b) (6), (b) (4) Morrow County, OF

CONTACT:

Umatilla County, OR



Monsanto Reference ID 2000-97XRAB

WA

(b)(4)

Whittman County, WA, USA

CONTACT: $(b)(7)(C), (b)(6), (b)(4)_{WA, USA}$ (b) (7)(C), (b)

(b) (4)

Lincoln County, WA, (b) (4) USA

CONTACT: (b) (7)(C), (b) (6), (b) (4) KS, (10) USA

(b) (4) Benton County, WA, (b) (4) USA

CONTACT: (b)(7)(C), (b)(6), (b)(4) wa usa, (b)(7)(C), (b)(6), (b)(4)

Ship To:

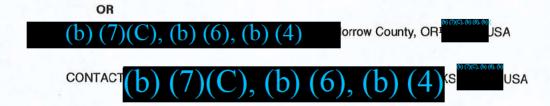
KS

(b)(4)

Sedgwick County, KS, (b) (4), USA

CONTACT: (b)(7)(C),(b)(6),(b)(4) KS CONTACT: USA

Monsanto Reference ID 2000-97XRAB







Monsanto Reference ID 2000-97XRAB

 $\text{(b) (4)} \qquad \text{Benton County, WA, (b) (4) USA}$

CONTACT: $(b)(7)(C), (b)(6), (b)(4)_{WA}$

Monsanto Reference ID 2000-97XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

OR (2), WA (2)

OR

Morrow County, OR, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: (b) (7)(C), (b) (6), (b) (4) where (6) (7)(C), (6) (6), (6) (6)

(C), (b) (6), (b) (4)Umatilla County, OR, USA, 5 acres.

RESPONSIBLE PERSON/RESEARCHER (b) (7)(C), (b) (6), (b)

WA

(b)(4)

Lincoln County, WA, USA, 5 acres.

RESPONSIBLE DERSON/RESEARCHER (b) (7)(C), (b) (6), (b) USA (b) (7)(C), (b) (6), (c)

(b)(4)

Nhitman County, WA, USA, 5 acres.

Page 8 of 10

Monsanto Reference ID 2000-97XRAB

RESPONSIBLE PERSON/RESEARCHER: (b) (7)(C), (b) (6), (b) (4) wa,

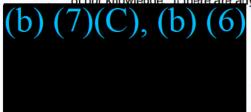


Monsanto Company 700 Chesterfield Parkway North St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-97XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000 Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 10, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-040-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-09n

Applicant #: 2000-97XRAB

Received:

February 9, 2000

Effective: March 10, 2000

Institution: Monsanto

Recipient: Wheat

Interstate destination: KS OR WA OR WA Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESP	ONSE TO NOTIFICATION
State concurs with APHIS det	ermination.
State DOES NOT CONCUR and of	fers the following reasons:
Name of State official:	Literatura de la compansión de la compan
Signature:	
Date:	
State	Rptloc01/R4

Mr. John Griesbach Oregon Department of Agriculture Plant Division 635 Capitol St., N.E. Salem, OR 97310-0110

February 10, 2000

Dear Mr. Griesbach:

Enclosed is notification 00-040-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-09n

Applicant #: 2000-97XRAB

Received:

February 9, 2000

Effective: March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS OR WA

Release destination: OR WA

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPON	SE TO NOTIFICATION
State concurs with APHIS deter	mination.
State DOES NOT CONCUR and offe	rs the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

February 10, 2000

Dear Mr. Wessels:

Enclosed is notification 00-040-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-09n

Applicant #: 2000-97XRAB

Received:

February 9, 2000

Effective: March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS OR WA

Release destination: OR WA

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE	E RESPONSE TO NOTIFICATION
State concurs with APHI	S determination.
State DOES NOT CONCUR a	and offers the following reasons:
Name of State official:	
Signature:	
Date:	
State:	Rptloc01/R4

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 10, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-040-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-09n

Applicant #: 2000-97XRAB

Received:

February 9, 2000

Effective:

March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS OR WA Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO NOTIFICATION	1 . 1 . 1
State concurs with APHIS determination.	and evaluate
State DOES NOT CONCUR and offers the following reasons	3 :
Name of State official: Thomas Som I	
Signature: (b) (7)(C), (b) (6)	
Date: 2/24/00	
State: Cansus Rotloc01/R4	





Animal and Plant Health Inspection Service 4700 River Road Riverdale, MD 20737

F of pages Post it Fax Note February 10, 2000

Mr. John Griesbach Oregon Department of Agriculture Plant Division 635 Capitol St., N.E. Salem, OR 97310-0110

Dear Mr. Griesbach:

Enclosed is notification 00-040-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number Received:

00-040-09n

February 9, 2000

Institution: Monsanto

Release destination:

Effective: Recipient:

March 10, 2000

Wheat

Applicant #: 2000-97XRAB

Interstate destination: KS OR WA OR WA

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

E. Dianne Hatmaker, Chier Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION

State concurs with APHIS determination.

State DOES NOT CONCUR and offers the following reasons:

Name of State official:

hloen J. R. Johnson

Signature:

3-10-2000

Rptloc01/R4

MAR 1 3 2000

Animal and Plant Health Inspection Service

3609022094

4700 River Road Riverdala, MD 20737

February 10, 2000

Mr. Thomas L. Wessels, Plant Services Program Manager Laboratory Services Division Washington Department of Agriculture 1111 Washington Street Olympia, WA 98504-2560

Dear Mr. Wessels:

Enclosed is notification 00-040-09n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-09n

Applicant #: 2000-97XRAB

Received:

February 9, 2000

Effective: Recipient:

March 10, 2000

Institution: Monsanto

Wheat

Interstate destination: KS OR WA Release destination: OR WA

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely

Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: R. Stoaks, PPQ, Sacramento, CA

STATE RESPONSE TO NOTIFICATION State concurs with APHIS determination. State DOES NOT CONCUR and offers the following reasons:

Name of State offici

Signature

Date: State:

Rptloc01/R4

March 15, 2000

(b) (7)(C), (b) (6)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (7)(C), (b) (6)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 15, 2000.

Interstate movement and Release Notification no. 00-040-09n (2000-97XRAB) Regulated article - Wheat Destinations - Kansas, Oregon, Washington

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

CC:

- T. Sim, Kansas State Board of Agric., Topeka, KS
- J. Griesbach, Oregon Dept. of Agric., Salem, OR
- T. Wessels, Washington Dept. of Agric., Olympia, WA
- R. Stoaks, PPQ, WR, Sacramento, CA
- D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-040-09n

Confirmation Report-Memory Send

Time : Mar-15-00 04:57pm

Tel line 1: Tel line 2: Name

: 002 Job number

: Mar-15 04:56pm Date

: 916367377085 To

Document Pages

: Mar-15 04:56pm Start time

: Mar-15 04:57pm End time

Pages sent : 01

*** SEND SUCCESSFUL *** Job number : 002



Animal and Plant riearch Inspection Service

4700 River Road Rivergale, MD 20737

March 15, 2000

(b)(7)(C),(b)(6)

Monsanto Company
700 Chesterfield Pkwy M
St. Louis, MO 63198

Dear (b) (7)(C), (b) (6)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c). effective on or after March 15, 2000.

Interestate movement and Release Notification no. 00-040-09n (2000-97XRAB) Regulated article - Wheat Destinations - Kansas, Oregon, Washington

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently attendance of performance. displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

CC:
T. Sim. Kansas State Board of Agric., Topeka, KS
J. Griesbach, Oregon Dept. of Agric., Salem, OR
T. Wessels, Washington Dept. of Agric., Olympia, WA
R. Stoaks, PPQ, WR, Sacramento, CA
D. DeWeese, PPQ, SCR, Jefferson City, MO



Ал Еции Орропилиу Етрю



March 31, 2000

MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Ms. Dianne Hatmaker Animal and Plant Health Inspection Services Biotechnology and Scientific Services 4700 River Road, Unit 147 Riverdale, MD

Dear Ms Hatmaker;

In reviewing Monsanto wheat notification, it was discovered a release site was inadvertently omitted USDA number 00-040-09n, Monsanto number 2000-97XRAB. The omitted site address is (b) (7)(C), (b) (6) (b) (7)(C), (b) (6) Whitman County, WA.

I apologize for any inconvenience this may cause. Please call me at 636/737-6032 if you have any questions.

Sincerely, (b) (7)(C), (b) (6)

cc:

(b) (7)(C), (b) (6), (b) (4) WA R. Stokes, Regional Biotechnologist, Sacramento, CA



July 25, 2000

MONSANTO COMPANY

700 CHESTERFIELD PKWY NORTH CHESTERFIELD, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

Ms. Dianne Hatmaker Animal and Plant Health Inspection Services Biotechnology and Scientific Services 4700 River Road, Unit 147 Riverdale, MD

Dear Ms. Hatmaker;

The following wheat sites for release have been canceled.

USDA# 00-040-09n, Monsanto # 2000-97XRAB

(b) (7)(C), (b) (6), (b) (4)

Heppner Morrow County, OR

(b) (4)

Lincoln County, OR

USDA # 00-059-03n, Monsanto # 2000-182XRAB

(b) (7)(C), (b) (6), (b) (4)

Thompson County, (b) (7)(c), (b) (6), (b)

(b) (7)(C), (b) (6), (b) (4)

(b) (7)(c), (b) (6), (b) (4) Trail County ND

USDA # 00-054-06n, Monsanto # 2000-170XRAB

(b) (7)(C), (b) (6), (b) (4)

(7)(C), (b) (6), (b) (4) Cass County ND

USDA # 00-054-09n, Monsanto # 2000-174XRAB

(b) (7)(C), (b) (6), (b) (4)

(b) (7)(C), (b) (6), (b) (4) Galletin County, MT

USDA # 00-059-07n, Monsanto # 2000-188XRAB

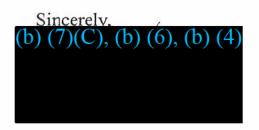
(b) (4) (b) (4)4inndoka County, ID (b) (4)

(b) (4) Canyon County ID

If you need further information, please contact me at 636/737-6032.

04/2/28°





MONSANTO COMPANY

700 CHESTERFIELD PKWY NORTH CHESTERFIELD, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

- cc J. Griesbach, Oregon Dept. of Agriculture, Salem, OR
 - D. Nelson, North Dakota Dept. of Agriculture, Bismarck, ND
 - E. Gingerly, Montana Dept. of Agriculture, Helena, MT
 - F. Vega, Idaho Dept. of Agriculture, Boise, ID
 - R. Stoaks, USDA, APHIS, Sacramento, CA

2000 Wheat Field Trial Report

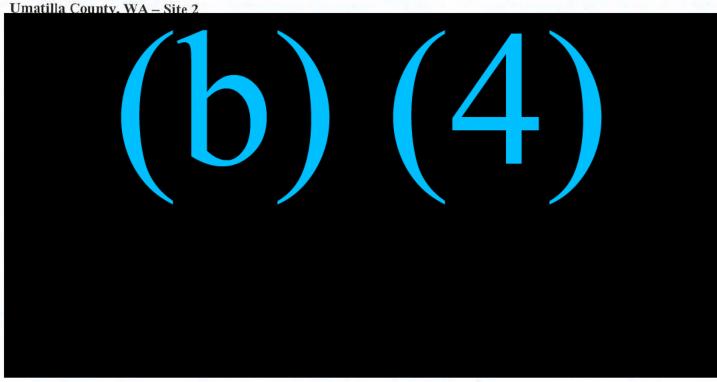
USDA # 00-040-09n

Monsanto # 2000-97XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

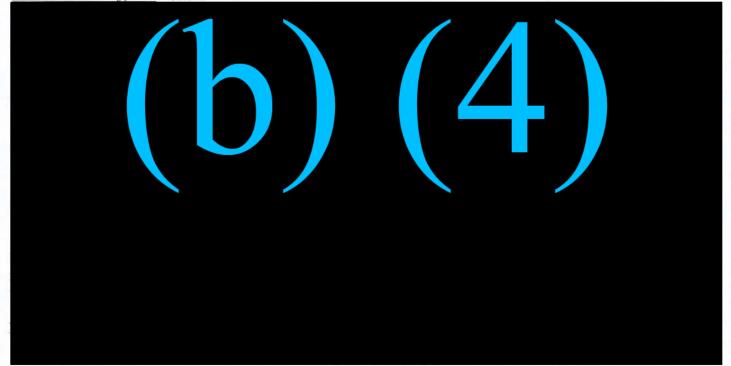
Location	County	State	
Site 1	Morrow	OR	(NOT PLANTED)
Site 2	Umatilla	OR	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Site 3	Lincoln	WA	(NOT PLANTED)
Site 4	Whitman	WA	(FIGURE AND







Whitman County, WA - Site 4



CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential within this application consists of field monitoring observations regarding biotechnology products under development.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort." Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (lOth Cir. 1990).

Information on commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act request. The courts have been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug.

Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justification for treating field monitoring observation information as CBI is provided below.

¹ In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, Critical Mass Energy Project v. NRC, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

Monsanto ID: 2000-97XRAB

FIELD MONITORING DATA AS CBI

Monsanto's Field Test Reports contain information regarding Field Monitoring Observations. This includes specific observations regarding biotechnology products under development. The Field Test Report will indicate which crop is the subject of the Report and the observations provide information that can reveal the trait being tested. For instance, observations concerning the roots of the plant is evidence that the product in testing has a trait designed to guard against rootworm.

Allowing a competitor access to such information could result in substantial competitive harm to Monsanto in that it reveals what products Monsanto is in the process of developing, the stage of development, the performance of the product under development, and an estimated time when such a product could be commercialized. A competitor could use this critical information regarding Monsanto's product pipeline to gain a competitive advantage against Monsanto. This advantage would start immediately upon the revelation of this information, in that a competitor could use this information to evaluate the timing and commercialization of its own products, to develop new competing products, and to convey information to the marketplace regarding its products compared to Monsanto's products.

In addition, the observations provide information concerning Monsanto's protocols for conducting Field Tests. Monsanto has invested substantial time and money in developing a workable system for conducting these trials and allowing others access to this information would give them an unfair advantage over Monsanto.

Identification of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

2000 Wheat Field Trial Report USDA # 00-040-09n Monsanto # 2000-97XRAB

December 7, 2001

Biotech Field Compliance Team Monsanto Company

Location	County	State	
Site 1	Morrow	OR	(NOT PLANTED)
Site 2	Umatilla	OR	• *************************************
Site 3	Lincoln	WA	(NOT PLANTED)
Site 4	Whitman	WA	No.

<u>Umatilla County, WA</u> – Site 2 <u>Planting Date</u>: April 5, 2000

Destruct/Harvest Date: July 28, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth, Weediness and Plant Stand Characteristics: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

Whitman County, WA – Site 4 Planting Date: April 3, 2000 Destruct Date: June 21, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth, Weediness and Plant Stand Characteristics: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area after Harvesting: [CBI deleted]

Whitman County, WA – Site 4 Planting Date: April 11, 2000 Harvest Date: August 17, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of Trial: [CBI deleted]

Field Monitoring Observations for Disease Susceptibility: [CBI deleted]

Field Monitoring Observations for Insect Susceptibility: [CBI deleted]

Field Monitoring Observations for Plant Growth, Weediness and Plant Stand Characteristics: [CBI

deleted]

Disposition of the Harvested Material: [CBI deleted]

Bp number: 00-040-11n

App number: 2000-102XRAB Begin movement: 2/08/00 Received: 2/09/00 End movement: 2/07/01 Institution: Monsanto Begin release: 2/08/00 Recipient: Wheat End release: 2/07/01 Status: Pending Acre: 5.00 Effective date: 3/10/00 CBI status: CBI HT - Glyphosate tolerant Phenotype: Comments: Resp person: Parsed name: Address1: Monsanto Company 700 Chesterfield Parkway N. Address2: Address3: Address4: City/State/Zip:Chesterfield, MO 63198 (b) (6), (b) (7)(C 636-737-7085 ______ Initial [SMK]* [2/11/2000* [V Assign Bp number and initial data entry [Review by biotechnologist Letter of notification to State Fed-X [] State response 0/d Loc Site Reg Interstate *Dest*KS * *SCR * Interstate *Dest*ND * *SCR * Interstate *Orig*KS * *SCR * Interstate *Orig*ND * *SCR * Release *ND 1*SCR * [] Enter genes into database Letter of acknowledgement/denial/withdraw 6. Enter final data into database

Asked to covered to covered the MI terminator description



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63i98 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-102XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-11n

1. USDA Reference Number

2. Applicant Reference Number 2000-102XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail (b) (6), (b) (7)(C

636/737-7085

(b) (6), (b) (7)(C)_{@ monsanto.com}

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-102XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 --

(h) (4)

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [(b) (4)

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID 2000-102XRAB

designation of transformed line: 33512 Constructs: PV-TXGT12 **GENE OF INTEREST** CBI CBI Gene: CTP7-CP4 --Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA. **GENE OF INTEREST** (b) (4) CBI Promoter: MP4 --Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4. CBI Terminator: M1 -- [

Monsanto Reference ID

2000-102XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

ship up to 800 pounds of wheat seed to and from each location.

ORIGIN:

DESTINATION:

KS, ND

KS, ND

Ship From:

KS

Sedgwick County, KS, (b) (4) USA

CONTACT: Brian Jenks, Monsanto Co, 5912 N. Merdian, Wichita, KS, 67204, USA, 701/857-7677

ND

Ward County, ND, (b) (4)



CONTACT: Brian Jenks, North Central Research Experim, 5600 Highway 83 South, Minot, ND, 58701, 701/857-7677

Ship To:

KS

Sedgwick County, KS(b) (4) USA

Monsanto Reference ID 2000-102XRAB

CONTACT: Brian Jenks, Monsanto Co, 5912 N. Merdian, Wichita, KS, 67204, USA, 701/857-7677



CONTACT: Brian Jenks, North Central Research Experim, 5600 Highway 83 South, Minot, ND, 58701, 701/857-7677

Monsanto Reference ID

2000-102XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

ND (1)

ND

(b) (4)

Ward County, ND, 5 acres.

RESPONSIBLE PERSON/RESEARCHER: Brian Jenks, North Central Research Experim, 5600 Highway 83 South, Minot, ND, 58701, 701/857-7677



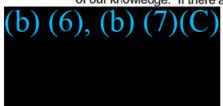
MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-102XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000

CONFIDENTIAL BUSINESS INFORMATION JUSTIFICATION

The information claimed as confidential concerns the description of the gene introduced into corn and/or the variety into which they were transformed. The gene description category includes the names and information about genes, promoters and expressed traits.

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. § 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. § 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C.Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. <u>Id.</u> at 530; <u>National Parks & Conservation Association v. Kleppe</u>, 547 F.2d 673, 679 (D.C.Cir. 1976); <u>Miami Herald Pub. Co. v. U.S. Small Business Administration</u>, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purposes of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (10th Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at [213, 1216-1218 (D.C. Cir. 1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentiality agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

Monsanto ID: 2000-102XRAB

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of a company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., Braintree Electric Light Dept. v. Dept. of Energy, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. Timken v. U.S. Customs Service, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., Teich v. Food & Drug Administration, 751 F.Supp. 243, 253 (D.D.C. 1990). Specific justifications for treating information in these two categories as CBI are provided below.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained through many person years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of high solid, insect, fungal, and virus resistant crops for more than 10 years, and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the person hours devoted to these projects, budgetary documents, field test agreements, and project documents for the Chesterfield facility.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait, and a stop signal. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this FOIA request, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the CBI Justification expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include Rhone-Poulenc, ICI, and Ciba-Geigy.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations of genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create

essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Names And Information About Genes, Promoters, And Expressed Traits

The release of information about the genes and promoters in the vectors will directly provide *competitors* with the knowledge of the *precise* genetic sequence - that Monsanto has found to be most desirable. If this information is disclosed, the *competitors* will have access to the structure of the Monsanto products, with the consequences outlined above. Patents *for* the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity And Characteristics Of Donor Organism

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identity of Recipient Cultivars

A donor organism is not claimed as CBI when the gene from such organism appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organism has been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be

Monsanto ID: 2000-102XRAB

able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification of Items claimed as Confidential Business Information

Items claimed as CBI as so indicated in the text as follows: [CBI - Deleted]. A non-confidential copy of the application is also included with the confidential item enclosed in brackets, "[]", as labeled as CBI.



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-102XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

Riverdale, MD 27037

00-040-11n

1. USDA Reference Number

2. Applicant Reference Number 2000-102XRAB

3. Applicant/Responsible Party

(b) (6), (b) (7)(C)

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

Phone

FAX EMail (b) (6), (b) (7)(C)

636/737-7085

b) (6), (b) (7)(C) monsanto.com

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-102XRAB

designation of transformed line: 33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-102XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted] CBI

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium

tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference ID

2000-102XRAB

7. Mode of Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

ship up to 800 pounds of wheat seed to and from each location.

ORIGIN:

KS, ND

DESTINATION:

KS, ND

Ship From:

KS

(b) (4)

Sedgwick County, KS(b) (4)USA

CONTACT:

(b) (6), (b) (7)(C), (b) (4)

KS, USA

(b) (6), (b) (7)(C), (b) (4)

ND

(b)(4)

Nard County, ND, (b) (4)

(b) (6), (b) (7)(C), (b) (4)

(b) (6), (b) (7)(C), (b) (4)

ND,

Ship To:

KS

(b)(4)

Sedgwick County, KS, (b) (4) USA

Monsanto Reference ID 2000-102XRAB



ND REDACTED

Ward County, ND, REDACTED

Monsanto Reference ID

2000-102XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

ND (1)

ND

(b)(4)

Ward County, ND, 5 acres.

RESPONSIBLE PERSON/RESFARCHER: (b) (6), (b) (7)(C), (b) (4) ND (b) (6), (b) (7)(C), (b) (4) ND (b) (6), (b) (7)(C), (b) (4)



MONSANTO COMPANY

700 CHESTERFIELD PARKWAY NORTH ST. LOUIS, MISSOURI 63198 PHONE (314) 694-1000 http://www.monsanto.com

Monsanto Reference ID 2000-102XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.

(b) (6), (b) (7)(C)

Monsanto Company February 08, 2000

MONSANTO COMPANY 700 CHESTERFIELD PARKWAY NORTH St. Louis, Missouri 63198 PHONE (314) 694-1000 http://www.monsanto.com

February 08, 2000

Monsanto Reference ID

2000-102XRAB

Permit Unit

USDA, APHIS, PPQ, BSS

4700 River Rd.

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00-040-11n

1. USDA Reference Number

2. Applicant Reference Number 2000-102XRAB

3. Applicant/Responsible Party

Phone

FAX

636/737-7085 **EMail**

b) (6), (b) (7)(C)₃ monsanto.com

b) (6), (b) (7)(C

Monsanto Company

700 Cheserfield Parkway North

St. Louis

MO

63198

4. Duration of Introduction

Interstate Movement and Release

February 08, 2000

February 07, 2001

5. Recipient

Wheat, Triticum aestivum

6. Regulated Article

Phenotypic Category:

HT

Phenotype:

Glyphosate Tolerant

Cultivar/Variety Bobwhite

Monsanto Reference ID

2000-102XRAB

designation of transformed line:

33391

Constructs: PV-TXGT10

GENE OF INTEREST

Promoter: CMoVa/I2 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: CMP3/I5 -- [CBI Deleted]

CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

Monsanto Reference ID

2000-102XRAB

designation of transformed line: 33512

Constructs: PV-TXGT12

GENE OF INTEREST

Promoter: CMP 3/I5 -- [CBI Deleted] CBI

Gene: CTP7-CP4 -- [CBI Deleted]

Terminator: NOS 3' -- A 3' non-translated region of the nopaline synthase gene of Agrobacterium tumefaciens T-DNA.

GENE OF INTEREST

Promoter: MP4 -- [CBI Deleted] CBI

Gene: CTP2-CP4 -- A gene fusion composed of the N-terminal chloroplast transit peptide sequence from the Arabidopsis thaliana EPSPS gene (CTP2), and the C-terminal 5-enolpyruvylshikimate-3-phosphate synthase gene (CP4) from an Agrobacterium species, strain CP4.

Terminator: M1 -- [CBI Deleted] CBI

Monsanto Reference	ID
2000-102XRAB	

7	Mode	of	Transformation
	Mode	oı	Transformation

Disarmed Agrobacterium tumefaciens

8. Introduction

Interstate Movement and Release

ship up to 800 pounds of wheat seed to and from each location.

ORIGIN:

KS, ND

DESTINATION:

KS, ND

Ship From:

KS

(b)(4)

Sedgwick County, KS, (b) (4) USA

CONTACT:

(b) (6), (b) (7)(C), (b) (4)

US

b) (6), (b) (7)(C), (b) (4)

ND,

ND

(b)(4)

Ward County, ND (b) (4)

CONTACT: (b) (6), (b) (7)(C), (b) (4)

(b) (6), (b) (7)(C), (b) (4)

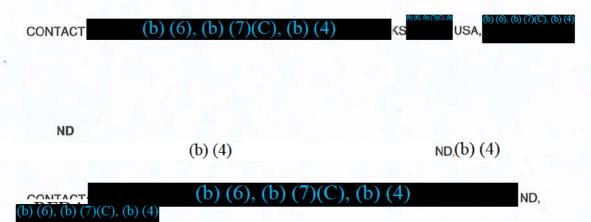
Ship To:

KS

(b)(4)

Sedgwick County, KS(b) (4)USA

Monsanto Reference ID 2000-102XRAB



Monsanto Reference ID 2000-102XRAB

Release Site:

NUMBER OF STATES/TERRITORIES AND SITES:

ND (1)

ND

(b) (4)

Ward County, ND, 5 acres.

(b) (6), (b) (7)(C), (b) (4) ND (b) (6), (b) (7)(C), (b) (4)

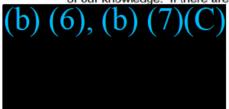
CBI-DELETED

MONSANTO COMPANY
700 CHESTERFIELD PARKWAY NORTH
ST. LOUIS, MISSOURI 63198
PHONE (314) 694-1000
http://www.monsanto.com

Monsanto Reference ID 2000-102XRAB

9. Certification

I certify that the regulated article will be introduced in accordance with the eligibility criteria and the performance standards set forth in 7 CFR 340.3. The above information is true to the best of our knowledge. If there are any changes, we will contact APHIS.



Monsanto Company February 08, 2000 Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 10, 2000

Dear Mr. Sim IV:

Enclosed is notification 00-040-11n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-11n

Applicant #: 2000-102XRAB

Received:

February 9, 2000

Effective: March 10, 2000

Institution: Monsanto

Recipient:

Wheat

Interstate destination: KS ND

Release destination:

Should you have comments, please respond either by telephone (301) 734-5787 or by facsimilie (301) 734-8910 on or before the effective date.

It is mandated under 7 CFR 340.3 (c) that APHIS provide an acknowledgement within 30 days of receipt.

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Permits and Risk Assessments Plant Protection and Quarantine

Enclosure

cc: D. DeWeese, PPQ, Jefferson City, MO

STATE RESPONSE TO	NOTIFICATION	
State concurs with APHIS determinat:	ion.	
State DOES NOT CONCUR and offers the	e following reasons:	
Name of State official:		
Signature:		8
Date:		
State:	Rptloc01/R4	

Mr. David R. Nelson, State Entomologist North Dakota Department of Agriculture 600 East Boulevard, 6th Floor Bismarck, ND 58505-0020

February 10, 2000

Dear Mr. Nelson:

Enclosed is notification 00-040-11n for your review. The information has been reviewed and it has been determined that the request meets the eligibility criteria and performance standards for notification under 7 CFR 340.3 (c).

Bp number

00-040-11n

Applicant #: 2000-102XRAB

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State DOES NOT CONCUR	R and offers the following reasons:
Name of State official:	
Signature:	
Date:	· ·
State.	Pptloc01/P4

Animal and Plant Health Inspection Service

4700 River Road Riverdale, MD 20737

Mr. Tom Sim IV, Administrator Plant Protection and Weed Control Section Kansas State Board of Agriculture 901 S. Kansas Avenue Topeka, KS 66612-1281

February 10, 2000

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Bp number Received:

00-040-11n

February 9, 2000

Institution: Monsanto

Interstate destination: KS ND Release destination:

Applicant #: 2000-102XRAB March 10, 2000 Effective:

Recipient: Wheat

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Enclosure

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STATE RESPONSE TO NOT	rification state cannot evolu
State concurs with APHIS determination.	rification state cannot evolution provident provident
State DOES NOT CONCUR and offers the fo	ollowing reasons:
Name of State official: Thomas Sam I	
Signature: (b) (6), (b) (7)(C)	
Date: 2/24/00	
Charles Vandal	Pnt1oc01/P4



An Equal Opportunity Employer

Animal and Plant Health Inspection Service

4700 River Road Riverdale, MD 20737

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Enclosure

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State concurs with APHIS dete	rmination.
	ers the following reasons:
	LNESSE.
Signature: (b) (6), (b) (7)(C)
Date: 2-16-00	
State: ND	Rptloc01/R4

PHIS - Protecting American Agriculture

An Equal Coporturity Employer

FEB 1 6 2000

(b) (6), (b) (7)(C)

Monsanto Company 700 Chesterfield Pkwy N St. Louis, MO 63198

Dear (b) (6), (b) (7)(C)

Your notification request has been <u>acknowledged</u> and may be executed according to 7 CFR 340.3(c), effective on or after March 10, 2000.

Interstate movement and Release Notification no. 00-040-11n (2000-102XRAB) Regulated article - Wheat Destinations - Kansas, North Dakota

You must comply with the performance standards as stated in 7 CFR 340.3(c). You or any of your cooperators who will be involved in handling the regulated article must be prepared with a written or verbal description of the methods to be employed to meet each performance standard. In addition, all packages must be clearly labeled as to content, and notification number must be prominently displayed on package.

This acknowledgment does not authorize use of "challenge organisms" for field test.

A copy of this letter of acknowledgment will be sent to the receiving State Regulatory Officials, and the Regional Program Managers, (Biotechnology).

Sincerely,

/s/ E. Dianne Hatmaker

E. Dianne Hatmaker, Chief Biotechnology Program Operations Scientific Services Plant Protection and Quarantine

Enclosure

cc:

T. Sim, Kansas State Board of Agric., Topeka, KS

D. Nelson, North Dakota Dept. of Agric., Bismarck, ND

D. DeWeese, PPQ, SCR, Jefferson City, MO

File number 00-040-11n

Confirmation Report-Memory Send

Time : Mar-09-00 02:47pm

Tel line 1: Tel line 2: Name

Job number : 813

Date : Mar-09 02:42pm

To : 916367377085

Document Pages : 01

Start time : Mar-09 02:42pm

End time : Mar-09 02:46pm

: 01 Pages sent

Job number : 813 *** SEND SUCCESSFUL ***

4700 River Road Riverdate, MD 20737

March 9, 2000

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700 Chesterfield Pkwy N St. Louis, MO 53198

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E. Diagne Hatmaker, Chier Stotechnology Program Operational Scientific Services Plant Protection and Quarantine

CC: T. Sim, Kansas State Board of Agric., Topeka, KS D. Nelson, North Dakota Dept. of Agric., Bismarck, ND D. DeWeese, PPQ, SCR, Jefferson City, MO



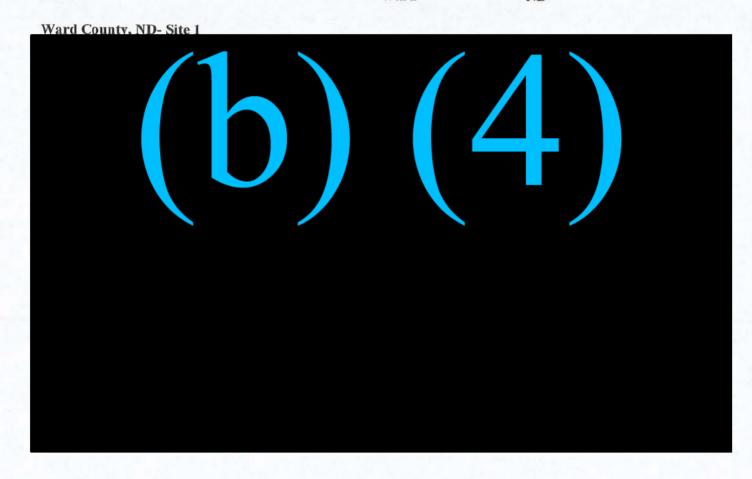
2000 Wheat Field Trial Report Monsanto # 2000-102XRAB USDA # 00-040-11n

Biotech Field Compliance Team June 15, 2001 **Monsanto Company**

Location Site 1

County Ward

State ND



Monsanto ID: 2000-102XRAB

CONFIDENTIAL BUSINESS JUSTIFICATION

The information claimed as confidential within this application consists of donor organisms and gene descriptions. The gene descriptions (referred to as vector componets) category includes the names and information about genes and their express traits, promoters and terminators (stop signal).

Legal Background

The Freedom of Information Act ("FOIA"), 5 U.S.C. Section 552, specifically exempts from release "trade secrets and commercial or financial information obtained from a person and privileged or confidential" ("Exemption 4"). 5 U.S.C. Section 552(b)(4). Exemption 4 applies where the disclosure of information would be likely to cause substantial harm to the competitive position of the owner, or where, in the case of voluntarily submitted information, the submitter would be less likely in the future to share data with the agency voluntarily. National Parks & Conservation Association v. Morton, 498 F.2d 765, 770 (D.C. Cir. 1974); Gulf & Western Industries, Inc. v. U.S., 615 F.2d 527, 530 (D.C.Cir. 1979).

A party seeking to demonstrate "substantial competitive harm" need not show actual competitive harm, but must only demonstrate the presence of competition and the likelihood of substantial competitive injury. Id. at 530; National Parks & Conservation Association v. Kleppe, 547 F.2d 673, 679 (D.C.Cir. 1976); Miami Herald Pub. Co. v. U.S. Small Business Administration, 670 F.2d 610, 614 (5th Cir. Unit B 1982).

For the purpose of FOIA, courts have defined the term "trade secret" to mean a "secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort. Public Citizen Health Research Group v. FDA, 704 F.2d 1280, 1288 (D.C.Cir. 1983); Anderson v. Dept. of Health & Human Services, 907 F.2d 936, 943-44 (10th Cir. 1990).

Information on gene description and commercial development falls squarely within this definition, and is the type of information accorded trade secret protection by the courts under Exemption 4 of the Freedom of Information Act. It is well established that information on the formulation and chemistry of a product should be treated as confidential for FOIA purposes. See, e.g., Anderson v. Dept. of Health & Human Services, 907 F.2d 936 (10th Cir. 1990). This is exactly the type of information provided by each and every subcategory listed above in the gene description category. Where, as in the case of the Monsanto products subject to this FOIA request, the development time and costs of the product have been substantial and the information can only be obtained by competitors at considerable cost, disclosure is prohibited. Greenberg v. Food and Drug Administration, 803 F.2d at 213, 1216-1218 (D.C.Cir.1986); Worthington Compressors, Inc. v. Costie, 622 F.2d 45, 51-52 (D.C.Cir. 1981). The existence of confidentaility agreements binding employees not to reveal the information is another factor considered by the courts. Greenberg v. FDA, 803 F.2d at 1216-1218.

The courts have also been very clear in finding commercial development information covered by Exemption 4 where the release of such information could allow competitors to procure a clear understanding of company's business practices and allow a competitor to cause harm to a company's competitive standing. See, e.g., <u>Braintree Electric Light Dept. v. Dept. of Energy</u>, 494 F.Supp. 287, 289-291 (D.D.C. 1980). Information on distribution channels, market strategies, pricing structures, and patterns of competition fall squarely within the Exemption because such information enables a competitor to gain an accurate picture of a company's marketing activities and the competitive structure of the market. <u>Timken v. U.S. Customs Service</u>, 531 F.Supp. 194, 200 (D.D.C. 1981). Typically, information concerning marketing strategies, and the names of independent contractors participating in a company's studies have been accorded confidential treatment. See, e.g., <u>Teich v. Food & Drug Administration</u>, 751 F.Supp. 243, 253 (D.D.C.1990). Specific justifications for treating information in these two categories as CBI are provided below*.

Monsanto ID: 2000-102XRAB

* In a case decided by the U.S. Court of Appeals for the District of Columbia Circuit, <u>Cirtical Mass Energy Project v. NRC</u>, No. 90-5120, August 21, 1992, the court determined that information given to the government voluntarily will be treated as confidential under Exemption 4 if such information is of the kind that the provider would not customarily make available to the public. To the extent any references and other information in the Monsanto applications were submitted voluntarily, such information is accorded protection from disclosure.

Gene Description

The essence of the commercial value of the Monsanto biotechnology products is the particular genetic information that confers the desired properties on the plant product, as well as the technical know-how inherent in this information. Monsanto is at the leading edge in the development of biotechnology products in a rapidly growing and highly competitive industry. This expertise has been gained trhough many man years of effort, and the expenditure of tens of millions of dollars on biotechnology research.

Monsanto has been working on the development of agricultural biotechnology since the ealy 1980's and has expended several million dollars in research and testing costs. Monsanto can document the development and testing costs by means of monthly summaries of the man hours devouted to these projects, budgetary documents, field test agreements, project documents for the various research facilities.

The uniqueness of this product lies in the particular combination of genetic components in the vectors transferred to these plants. Each genetic entity in these vectors has three pieces of information: a promoter region, the gene for the expression of the trait and the terminator. Although the information on each of these vector components may be in the public domain, the particular combination of the components put together by Monsanto is unique and represents years of effort and millions of dollars of expense.

To achieve the products which are the subject of this Confidential Business Information Justification, Monsanto has developed and tested many different plant strains using different combinations of genetic components. The plant products developed by Monsanto represent the best fit of the components, and the best mode of gene expression of the desired traits. The specific combination of genetic information on the vectors transferred to the Monsanto products has been kept strictly confidential. Monsanto employees and contractors under contract to Monsanto are contractually obligated to keep this information confidential.

There are many competitors of Monsanto, both national and international, who have the expertise not only to replicate Monsanto's products, but also to use Monsanto's technology to develop other products which would be competitive with Monsanto, thereby saving millions of dollars and years of development effort. These competitors include, but are not limited to companies such: Novartis, Agrevo, Xeneca and DuPont.

Monsanto's competitors cannot presently duplicate Monsanto's commercially valuable products from information in the public domain without going through the same painstaking trial and error development and testing of many different combinations of genetic information. It is important to emphasize that although there may be information about Monsanto products available in patent applications, this information is voluminous and general in nature, and does not identify the specific combinations genetic information which Monsanto has found to be most effective. A competitor cannot determine from the patent applications which particular combination of genes and transgenic products will prove to be commercially valuable.

Access to gene description information for Monsanto's products would allow competitors to create essentially "copy-cat" products (avoiding any technical patent infringement) that would result in a market share loss for Monsanto of millions of dollars. By performing simple copy work, these competitors would avoid the millions of dollars and many years of research and development effort expended by Monsanto to develop its commercial products.

The release of gene description information would also provide competitors with commercially valuable knowledge about the particular products that Monsanto is planning to commercialize and the likely time frame for commercialization. This information would be extremely helpful to these companies in developing their own marketing strategies and development plans in a highly competitive market.

Monsanto ID: 2000-102XRAB

Names And Information About Genes, Promoters, Terminators And Expressed Traits

The release of information about the genes, promoters and terminators in the vectors will directly provide competitors with the knowledge of the precise genetic sequence that Monsanto has found to be most desirable. If this information is disclosed, the competitors will have access to the the structure of the Monsanto products, with the consequences outlined above. Patents for some of the products at issue in this matter are pending, but have not been issued.

Information on the expressed trait of the genes is tantamount to providing the name of the genes, and will allow Monsanto's competitors to readily identify the particular genes that have been transferred to the Monsanto products. The release of any information relating to changes made to an original gene to facilitate fusion with another gene would explicitly reveal Monsanto's trade secret technology for developing gene combinations.

Identity and Characteristics of Donor Organisms

A donor organism is not claimed as CBI when the gene from such organsim appears alone. CBI is only claimed for the name and/or identifying characteristics of a donor organism when the gene from this organism is used in a new and unique combination with another gene to give greatly enhanced expression of the desired trait.

The identity of the donor organisms have been incorporated in the description for each of the components of the vector for the product subject to this justification have been claimed as confidential by Monsanto because the disclosure of this information will essentially reveal to Monsanto's competitors the nature of the genes for the expressed traits. Likewise, information on the characteristics of the donor organisms and the source of the characterization of the donor will reveal directly or with little difficulty the identity of the donor organism. With this information in hand, even without information on the other components of the vector, Monsanto's competitors will be accorded a tremendous advantage in their search for competitive products, and will be able to unfairly take advantage of the expensive and time intensive effort by Monsanto to identify this donor as the most suitable organism for providing the genetic information necessary to best express the desired traits.

Identification Of Physical Site And Release Location

The identity of the physical site and release locations have been claimed confidential by Monsanto. Disclosure of this information would reveal precise shipping locations and field testing facilities to environmental activists. The destruction of this valuable technology could substantially put at risk the safety of Monsanto's cooperators and jeopardize the expense and time intensive effort by Monsanto.

Identification Of Items claimed as Confidential Business Information (CBI)

Items claimed as CBI indicated in the text are labeled as **[CBI]** and that document is labeled as Confidential. A non-confidential copy of the application is also included and the CBI information that has been deleted is enclosed in brackets labeled **[CBI-Deleted]** and that document labeled as CBI-Deleted.

CBI-DELETED

2000 Wheat Field Trial Report **Monsanto # 2000-102XRAB** USDA # 00-040-11n

Biotech Field Compliance Team June 15, 2001 **Monsanto Company**

Location Site 1

County Ward

State ND

Ward County, ND- Site 1

Planting Date: May 23, 2000 Destruct Date: August 2, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of Trial: [CBI deleted]

Field Monitoring for Disease Susceptibility: [CBI deleted]

Field Monitoring for Insect Susceptibility: [CBI deleted]

Field Monitoring for Plant Growth, Weediness and Plant Stand Characteristics: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area after Harvesting: [CBI deleted]

General Results of Trial: [CBI deleted]

2000 Wheat Field Trial Report Monsanto # 2000-179XRAB USDA # 00-059-01n

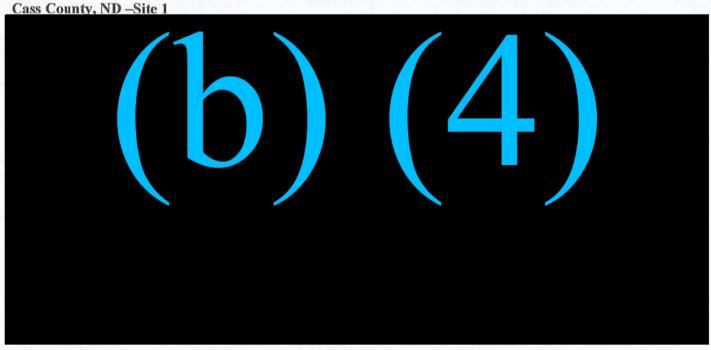
Biotech Field Compliance Team July 11, 2001 **Monsanto Company**

Location Site 1 Site 2

County Cass Cass

State ND ND

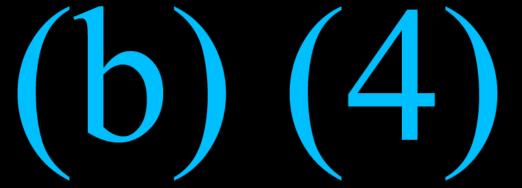
Cass County, ND Site 1



Cass County, ND -Site 2



Cass County, ND Site 2



Monsanto ID: 2000-179XRAB

CONFIDENTIAL BUSINESS JUSTIFICATION

The information claimed as confidential within this application consists of donor organisms and gene descriptions. The gene descriptions (referred to as vector componets) category includes the names and information about genes and their express traits, promoters and terminators (stop signal).

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Monsanto ID: 2000-179XRAB

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2000 Wheat Field Trial Report USDA # 00-059-01n Monsanto # 2000-179XRAB

Biotech Field Compliance Team July 11, 2001 **Monsanto Company**

Location County State Site 1 Cass ND Site 2 Cass ND

Cass County, ND Site 1

Planting Date: May 10, 2000 Destruct Date: July 21, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of Trial: [CBI deleted]

Field Monitoring for Disease Susceptibility: [CBI deleted]

Field Monitoring for Insect Susceptibility: [CBI deleted]

Field Monitoring for Plant Growth, Weediness and Plant Stand Characteristics: [CBI deleted]

Cass County, ND -Site 1

Planting Date: May 8, 2000 Destruct Date: July 21, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of Trial: [CBI deleted]

Field Monitoring for Disease Susceptibility: [CBI deleted]

Field Monitoring for Insect Susceptibility: [CBI deleted]

Field Monitoring for Plant Growth, Weediness and Plant Stand Characteristics: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area after Harvesting: [CBI deleted]

Cass County, ND -Site 2

Planting Date: May 12, 2000 Harvest Date: August 15, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10, line 33391

Purpose of Trial: [CBI deleted]

Field Monitoring for Disease Susceptibility: [CBI deleted]

CBI-DELETED

Field Monitoring for Insect Susceptibility: [CBI deleted]

Field Monitoring for Plant Growth, Weediness and Plant Stand Characteristics: [CBI deleted]

Disposition of the Harvested Material: [CBI deleted]

Cass County, ND Site 2

Planting Date: May 9, 2000 Destruct Date: August 24, 2000

Vector Constructs/Line Numbers Planted: PV-TXGT10 line 33391

Purpose of Trial: [CBI deleted]

Field Monitoring for Disease Susceptibility: [CBI deleted]

Field Monitoring for Insect Susceptibility: [CBI deleted]

Field Monitoring for Plant Growth, Weediness and Plant Stand Characteristics: [CBI deleted]

Method of Devitalization or Final Disposition of Plot Area after Harvesting: [CBI deleted]